



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>6</sup> :</b> <b>C12N 15/12, C07K 14/47, A61K 38/17,</b> <b>C12N 15/10, C12Q 1/68</b>	<b>A2</b>	<b>(11) International Publication Number:</b> <b>WO 98/45436</b>  <b>(43) International Publication Date:</b> 15 October 1998 (15.10.98)
<b>(21) International Application Number:</b> PCT/US98/06955  <b>(22) International Filing Date:</b> 10 April 1998 (10.04.98)  <b>(30) Priority Data:</b> 08/838,821                      10 April 1997 (10.04.97)                      US  <b>(71) Applicant:</b> GENETICS INSTITUTE, INC. [US/US]; 87 CambridgePark Drive, Cambridge, MA 02140 (US).  <b>(72) Inventors:</b> JACOBS, Kenneth; 151 Beaumont Avenue, Newton, MA 02160 (US). MCCOY, John, M.; 56 Howard Street, Reading, MA 01867 (US). LAVALLIE, Edward, R.; 113 Ann Lee Road, Harvard, MA 01451 (US). RACIE, Lisa, A.; 124 School Street, Acton, MA 01720 (US). MERBERG, David; 2 Orchard Drive, Acton, MA 01720 (US). TREACY, Maurice; 93 Walcott Road, Chestnut Hill, MA 02167 (US). SPAULDING, Vikki; 11 Meadowbank Road, Billerica, MA 01821 (US). AGOSTINO, Michael, J.; 26 Wolcott Avenue, Andover, MA 01810 (US).  <b>(74) Agent:</b> SPRUNGER, Suzanne, A.; Genetics Institute, Inc., 87 CambridgePark Drive, Cambridge, MA 02140 (US).		<b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>Without international search report and to be republished upon receipt of that report.</i>
<b>(54) Title:</b> SECRETED EXPRESSED SEQUENCE TAGS (sESTs)  <b>(57) Abstract</b>  Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.		

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5 FIELD OF THE INVENTION

## BACKGROUND OF THE INVENTION

Although this "shortcut" approach to genomic sequencing presents savings of effort compared to sequencing of the complete genome, it still produced a vast array of ESTs which may not be directly useful as protein therapeutics. To date, the majority of protein-related drug discovery has focused on the use of secreted proteins to produce a desired therapeutic effect. Since the EST approach theoretically identifies all expressed proteins, it produces an EST library which contains a mixture of secreted proteins (such as hormones, cytokines and receptors) and non-secreted proteins (such as, for example, metabolic enzymes and cellular structural proteins), without identifying which ESTs correspond to proteins falling into either category. As a result, these methods are not optimally tailored to the needs of investigators searching for secreted proteins because they must separate the secreted "wheat" from the non-secreted "chaff", wasting effort and resources in the process.

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proteins, namely "secreted expressed sequence tags" or "sESTs". It is to these sESTs that the present invention is directed.

#### SUMMARY OF THE INVENTION

5           The present invention provides for sESTs isolated from a variety of human RNA/cDNA sources.

In preferred embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

15 In other embodiments, the present invention provides an isolated polynucleotide  
consisting of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

In further embodiments, the present invention provides an isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

In yet other embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

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NO:1357, SEQ ID NO:1358, SEQ ID NO:1359, SEQ ID NO:1360, SEQ ID  
5 NO:1361, SEQ ID NO:1362, SEQ ID NO:1363, SEQ ID NO:1364, SEQ ID  
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NO:1369, SEQ ID NO:1370, SEQ ID NO:1371, SEQ ID NO:1372, SEQ ID  
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NO:1377, SEQ ID NO:1378, SEQ ID NO:1379, SEQ ID NO:1380, SEQ ID  
10 NO:1381, SEQ ID NO:1382, SEQ ID NO:1383, SEQ ID NO:1384, SEQ ID  
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NO:1405, SEQ ID NO:1406, SEQ ID NO:1407, SEQ ID NO:1408, SEQ ID  
NO:1409, SEQ ID NO:1410, SEQ ID NO:1411, SEQ ID NO:1412, SEQ ID  
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NO:1469, SEQ ID NO:1470, SEQ ID NO:1471, SEQ ID NO:1472, SEQ ID  
NO:1473, SEQ ID NO:1474, SEQ ID NO:1475, SEQ ID NO:1476, SEQ ID  
NO:1477, SEQ ID NO:1478, SEQ ID NO:1479, SEQ ID NO:1480, SEQ ID



NO:1481, SEQ ID NO:1482, SEQ ID NO:1483, SEQ ID NO:1484, SEQ ID  
 NO:1485, SEQ ID NO:1486, SEQ ID NO:1487, SEQ ID NO:1488, SEQ ID  
 NO:1489, SEQ ID NO:1490, SEQ ID NO:1491, SEQ ID NO:1492, SEQ ID  
 NO:1493, SEQ ID NO:1494, SEQ ID NO:1495, SEQ ID NO:1496, SEQ ID  
 5 NO:1497, SEQ ID NO:1498, SEQ ID NO:1499, and SEQ ID NO:1500;

or to a complement of said sequence.

The invention also provides for proteins encoded by the above-described polynucleotides.

10

### DETAILED DESCRIPTION

The nucleotide sequences of the sESTs of the present invention are reported in the Sequence Listing below. Table 2 lists the "Clone ID Nos." assigned by applicants to each SEQ ID NO: in the Sequence Listing.

15 Table 2

Each pair of entries in this table consists of the SEQ ID NO (e.g., 1, 2, etc.) followed by the Clone ID No. for such sequence (e.g., B11, B18, etc.).

	1	BV31	18	CB302	35	BZ83	52	CD244
	2	BV34	19	CB318	36	BZ87	53	CD265
20	3	BV37	20	CB321	37	CB15	54	BT217
	4	BV45	21	CB96	38	CB2	55	BV278
	5	BV8	22	CB98	39	CB44	56	BV280
	6	BV93	23	BZ42	40	CC11	57	BV282
	7	BV99	24	BZ53	41	CC182	58	BV285
25	8	CB100	25	BZ56	42	CC298	59	BV286
	9	CB107	26	BZ6	43	CC310	60	BV291
	10	CB110	27	BZ607	44	CC323	61	BV295
	11	CB114	28	BZ61	45	CC332	62	BW389
	12	CB118	29	BZ62	46	CC335	63	BX135
30	13	CB123	30	BZ641	47	CC338	64	BX141
	14	CB129	31	BZ644	48	CC41	65	BX148
	15	CB137	32	BZ72	49	CC52	66	BZ1
	16	CB239	33	BZ74	50	CD107	67	BZ16
	17	CB259	34	BZ82	51	CD205	68	BZ187

	69	BZ19	103	CE159	137	CH315	171	CC194
	70	BZ205	104	CE2	138	CH325	172	CC198
	71	BZ222	105	CE347	139	BZ568	173	CC199
	72	BZ230	106	CE36	140	BZ578	174	CC205
5	73	BZ234	107	CE40	141	BZ588	175	CC215
	74	BZ244	108	CE87	142	BZ597	176	CC253
	75	BZ269	109	CG1	143	BZ598	177	CC258
	76	BZ280	110	CG44	144	CH637	178	CC259
	77	BZ288	111	CG60	145	CH644	179	CC265
10	78	BZ304	112	CG68	146	CH699	180	CC288
	79	BZ328	113	BP202	147	CI240	181	CC95
	80	BZ331	114	BP242	148	CI247	182	CC96
	81	BP646	115	BP243	149	CJ1	183	CD311
	82	BP652	116	BZ444	150	CJ19	184	CD323
15	83	BP656	117	BZ453	151	CJ24	185	CH338
	84	BP666	118	CC233	152	CJ27	186	CH355
	85	BP667	119	CC242	153	CJ3	187	CH377
	86	BP674	120	CC247	154	CJ37	188	CH421
	87	BP695	121	CC344	155	CJ42	189	CH425
20	88	BP705	122	CC346	156	CJ44	190	CH522
	89	BP713	123	CC351	157	CJ49	191	CH541
	90	BP720	124	CC359	158	CJ50	192	CH555
	91	BP750	125	CC364	159	CJ55	193	CH558
	92	BP754	126	CC365	160	CJ6	194	CH582
25	93	BW143	127	CC374	161	CJ76	195	CH595
	94	BR307	128	CE303	162	CJ77	196	CH720
	95	BR309	129	CE328	163	CJ84	197	CH723
	96	BR312	130	CG199	164	CJ86	198	CH724
	97	BR318	131	CG209	165	CJ91	199	CH735
30	98	CB187	132	CG210	166	CC111	200	CH742
	99	CB190	133	CG350	167	CC118	201	CI126
	100	CB204	134	CG354	168	CC120	202	CI129
	101	CB213	135	CG426	169	CC126	203	CI133
	102	CE120	136	CH303	170	CC130	204	CI181

	205	CI229	239	CG160	273	CI395	307	CJ397
	206	CI25	240	CG175	274	CI407	308	CJ400
	207	CI52	241	CG176	275	CI411	309	CJ404
	208	CI84	242	CG180	276	CI437	310	CJ415
5	209	CI91	243	CG279	277	CI443	311	CJ420
	210	BP163	244	CG292	278	CI444	312	CJ424
	211	BP175	245	CG300	279	CI459	313	CJ434
	212	BP199	246	CG301	280	CI480	314	CJ454
	213	BP272	247	CG314	281	CI490	315	CJ457
10	214	BP284	248	CG315	282	CI492	316	CJ481
	215	BP294	249	CG324	283	CI493	317	CJ493
	216	BP299	250	CG336	284	CI510	318	CJ501
	217	BP300	251	CG99	285	CI522	319	CJ514
	218	BP306	252	CH143	286	CI534	320	CJ539
15	219	BP311	253	CH207	287	CI542	321	CJ540
	220	BP312	254	CH224	288	CI560	322	CJ549
	221	BP327	255	CH227	289	CI561	323	CJ551
	222	BP345	256	CH245	290	CI583	324	CK126
	223	BP368	257	CH246	291	CI586	325	CK151
20	224	BP467	258	CH27	292	CJ145	326	CK181
	225	BP468	259	CH30	293	CJ149	327	CK201
	226	BR375	260	CH4	294	CJ160	328	CK213
	227	BR390	261	CH64	295	CJ164	329	CK218
	228	BR408	262	CH78	296	CJ168	330	CK234
25	229	BR418	263	CH85	297	CJ176	331	CK37
	230	BY66	264	CH87	298	CJ183	332	CK48
	231	CF118	265	CN320	299	CJ194	333	CL104
	232	CF127	266	CN343	300	CJ206	334	CL110
	233	CF22	267	CN344	301	CJ230	335	CL122
30	234	CF235	268	CN395	302	CJ237	336	CL132
	235	CG109	269	CN423	303	CJ257	337	CL147
	236	CG131	270	CI363	304	CJ265	338	CL152
	237	CG153	271	CI386	305	CJ378	339	CL181
	238	CG158	272	CI392	306	CJ389	340	CL182

	341	CL399	375	CN516	409	CO58	443	CO155
	342	CL469	376	CN532	410	CO48	444	CO153
	343	CL470	377	CN552	411	CO444	445	CO145
	344	CL481	378	CN593	412	CO431	446	CO140
5	345	CL493	379	CN619	413	CO391	447	CO139
	346	CM12	380	CN621	414	CO384	448	CO128
	347	CM178	381	CN667	415	CO36	449	CO1254
	348	CM188	382	CN703	416	CO351	450	CO1247
	349	CM194	383	CN718	417	CO337	451	CO1232
10	350	CM246	384	CN729	418	CO327	452	CO1224
	351	CM251	385	CN835	419	CO315	453	CO1223
	352	CM54	386	CN896	420	CO304	454	CO1206
	353	CM62	387	CO933	421	CO270	455	CO1198
	354	CN140	388	CO924	422	CO268	456	CO1196
15	355	CN171	389	CO908	423	CO264	457	CO1194
	356	CN173	390	CO900	424	CO261	458	CO1187
	357	CN238	391	CO889	425	CO257	459	CO1180
	358	CN29	392	CO888	426	CO253	460	CO1178
	359	CN291	393	CO874	427	CO25	461	CO1175
20	360	CN304	394	CO851	428	CO246	462	CO117
	361	CN327	395	CO83	429	CO244	463	CO1168
	362	CN49	396	CO821	430	CO240	464	CO1164
	363	CN50	397	CO806	431	CO228	465	CO1162
	364	CN54	398	CO798	432	CO223	466	CO1161
25	365	CN65	399	CO79	433	CO222	467	CO1159
	366	CJ305	400	CO71	434	CO209	468	CO1153
	367	CJ316	401	CO7	435	CO205	469	CO1151
	368	CJ317	402	CO69	436	CO204	470	CO1137
	369	CJ336	403	CO66	437	CO20	471	CO1123
30	370	CJ347	404	CO639	438	CO197	472	CO1076
	371	CJ360	405	CO638	439	CO185	473	CO1072
	372	CJ365	406	CO625	440	CO170	474	CO1026
	373	CJ366	407	CO62	441	CO17	475	CO1000
	374	CN483	408	CO602	442	CO163	476	CN755

	477	CN736	511	CR1166	545	CR632	579	CO409
	478	CN709	512	CR1186	546	CR641	580	CO474
	479	CO975	513	CR1190	547	CT729	581	CO480
	480	CO990	514	CR329	548	CN922	582	CO500
5	481	CP280	515	CR354	549	CN934	583	CO519
	482	CP283	516	CR377	550	CN951	584	CO522
	483	CP287	517	CR390	551	CN952	585	CO526
	484	CP289	518	CR392	552	CN980	586	CO559
	485	CP294	519	CR422	553	CP111	587	CO595
10	486	CP304	520	CR423	554	CP147	588	CO605
	487	CP307	521	CR466	555	CU13	589	CO618
	488	CP311	522	CR477	556	CP251	590	CO629
	489	CP313	523	CR478	557	CP258	591	CO643
	490	CP314	524	CR482	558	CP33	592	CO653
15	491	CP328	525	CR491	559	CP41	593	CO661
	492	CP352	526	CR494	560	CP91	594	CO667
	493	CQ286	527	CR502	561	CP92	595	CO695
	494	CQ294	528	CR506	562	CQ160	596	CO696
	495	CQ304	529	CR513	563	CQ165	597	CO707
20	496	CQ309	530	CR514	564	CQ268	598	CO716
	497	CQ331	531	CR515	565	CQ30	599	CO718
	498	CQ333	532	CR527	566	CR100	600	CO720
	499	CR1116	533	CR529	567	CR178	601	CO722
	500	CR1118	534	CR537	568	CR184	602	CO736
25	501	CR1121	535	CR538	569	CR263	603	CO763
	502	CR1127	536	CR540	570	CR335	604	CO767
	503	CR1135	537	CR541	571	CR4	605	CP116
	504	CR1141	538	CR545	572	CR61	606	CP151
	505	CR1142	539	CR587	573	CR93	607	CI293
30	506	CR1144	540	CR588	574	CO282	608	CI294
	507	CR1147	541	CR593	575	CO310	609	CI298
	508	CR1155	542	CR594	576	CO334	610	CU14
	509	CR1156	543	CR611	577	CO387	611	CU2
	510	CR1162	544	CR618	578	CO390	612	CU25

	613	CU32	647	CR678	681	CT748	715	CS520
	614	CU39	648	CR726	682	CT738	716	CS524
	615	CU40	649	CR733	683	CT726	717	CS534
	616	DA10	650	CR778	684	CT706	718	CT14
5	617	DA136	651	CR836	685	CT705	719	CT142
	618	DA155	652	CR839	686	CT702	720	CT143
	619	DA16	653	CR872	687	CT693	721	CT149
	620	DA165	654	CR890	688	CT677	722	CT156
	621	DA170	655	CR916	689	CT658	723	CT159
10	622	DA183	656	CR929	690	CT645	724	CT162
	623	DA223	657	CR930	691	CT636	725	CT188
	624	DA224	658	CR936	692	CT631	726	CT189
	625	DA225	659	CR974	693	CT616	727	CT190
	626	DA227	660	CT747	694	CT611	728	CT193
15	627	DA228	661	CT727	695	CT600	729	CT194
	628	DA234	662	CT690	696	CT585	730	CT2
	629	DA244	663	CT649	697	CT583	731	CT207
	630	DA246	664	CT624	698	CS224	732	CT220
	631	DA274	665	CT564	699	CS255	733	CT223
20	632	DA471	666	CT88	700	CS267	734	CT226
	633	DA490	667	CT864	701	CS271	735	CT227
	634	DA495	668	CT857	702	CS278	736	CT24
	635	DA496	669	CT852	703	CS284	737	CT254
	636	DA504	670	CT838	704	CS296	738	CT256
25	637	DA505	671	CT808	705	CS297	739	CT258
	638	DA507	672	CT807	706	CS317	740	CT271
	639	DA516	673	CT797	707	CS319	741	CT275
	640	DA529	674	CT791	708	CS322	742	CT28
	641	DA84	675	CT785	709	CS353	743	CT284
30	642	CR1003	676	CT783	710	CS366	744	CT293
	643	CR1013	677	CT780	711	CS471	745	CO1020
	644	CR1044	678	CT771	712	CS475	746	CO1043
	645	CR1056	679	CT754	713	CS485	747	CO1067
	646	CR1063	680	CT750	714	CS516	748	CO1069

	749	CO1080	783	DB257	817	CW1617	851	CT384
	750	CO1081	784	DB343	818	CW1632	852	CT392
	751	CO1094	785	DB415	819	CW1636	853	CT394
	752	CO956	786	DB53	820	CW1640	854	CT415
5	753	CO973	787	DB85	821	CW169	855	CT421
	754	CJ471	788	CW1000	822	CW172	856	CT423
	755	CJ472	789	CW1038	823	CW173	857	CT434
	756	CJ475	790	CW1087	824	CW175	858	CT440
	757	CJ483	791	CW1100	825	CV123	859	CT443
10	758	CJ484	792	CW1109	826	CV156	860	CT450
	759	CJ485	793	CW1112	827	CV160	861	CT453
	760	CJ486	794	CW115	828	CV192	862	CT457
	761	CJ488	795	CW1150	829	CV203	863	CT466
	762	CJ496	796	CW1155	830	CV215	864	CT474
15	763	CJ497	797	CW1177	831	CV227	865	CT475
	764	CJ498	798	CW1195	832	CV263	866	CT479
	765	CJ507	799	CW1200	833	CV275	867	CT489
	766	CJ508	800	CW1201	834	CV305	868	CT51
	767	CJ519	801	CW1214	835	CV328	869	CT519
20	768	CJ520	802	CW1225	836	CV380	870	CT521
	769	CJ521	803	CW1230	837	CV394	871	CT526
	770	CJ522	804	CW1233	838	CV410	872	CT536
	771	CJ534	805	CW1272	839	CV416	873	CT541
	772	CJ536	806	CW1292	840	CV461	874	CT547
25	773	CJ543	807	CW1306	841	CV493	875	CT550
	774	CJ544	808	CW1311	842	CV501	876	CT559
	775	CJ547	809	CW1314	843	CT3	877	CT562
	776	CK53	810	CW1334	844	CT314	878	DE36
	777	CK7	811	CW1365	845	CT317	879	DE37
30	778	CK70	812	CW1372	846	CT320	880	DE4
	779	CL49	813	CW149	847	CT326	881	DE42
	780	CL63	814	CW152	848	CT340	882	DE63
	781	DB203	815	CW1574	849	CT353	883	DE70
	782	DB208	816	CW1611	850	CT358	884	DE83

	885	DE103	919	CS771	953	CW775	987	DA337
	886	DE105	920	CS773	954	CW795	988	DA348
	887	DE110	921	CS776	955	CW802	989	DA373
	888	DE114	922	CW222	956	CW823	990	DA388
5	889	DE117	923	CW224	957	CW835	991	DA389
	890	DE119	924	CW226	958	CZ115	992	DA390
	891	DE91	925	CW232	959	CZ122	993	DA391
	892	DE95	926	CW254	960	CZ186	994	DA414
	893	DE96	927	CW272	961	CZ214	995	DA428
10	894	CW420	928	CW280	962	CZ247	996	DA443
	895	CW424	929	CW313	963	CZ251	997	DA451
	896	CW457	930	CW314	964	CZ268	998	CW1458
	897	CW485	931	CW347	965	CZ270	999	CW1475
	898	CS383	932	CW354	966	CZ278	1000	CW1481
15	899	CS384	933	CW363	967	CZ291	1001	CW1506
	900	CS399	934	CW374	968	CZ320	1002	CW1510
	901	CS405	935	CW382	969	CZ326	1003	CW1543
	902	CS409	936	CW383	970	CZ362	1004	CW1550
	903	CS431	937	CW386	971	CW1414	1005	CW1552
20	904	CS438	938	CW388	972	CW1440	1006	CZ372
	905	CS454	939	CW512	973	CE209	1007	CZ374
	906	CS588	940	CW517	974	CE216	1008	CW902
	907	CS629	941	CW53	975	CE232	1009	CW922
	908	CS636	942	CW554	976	CE242	1010	CW924
25	909	CS637	943	CW585	977	CF193	1011	CW976
	910	CS638	944	CW618	978	CH776	1012	CW979
	911	CS645	945	CE197	979	CW1381	1013	CW984
	912	CS679	946	CW662	980	CW1389	1014	CW998
	913	CS682	947	CW675	981	CW1399	1015	CZ1
30	914	CS734	948	CW691	982	CZ653	1016	CW753
	915	CS743	949	CW707	983	CZ681	1017	CW759
	916	CS752	950	CW735	984	CZ711	1018	CW800
	917	CS756	951	CW762	985	CZ719	1019	CW891
	918	CS765	952	CW768	986	DA306	1020	CW960



	1021	CT80	1055	DC14	1089	DH1206	1123	DF478
	1022	DF1115	1056	CW1670	1090	DH1212	1124	DF483
	1023	DF1117	1057	CW1682	1091	DH1213	1125	DF494
	1024	DF1125	1058	DF814	1092	DH190	1126	DF499
5	1025	DF134	1059	DF821	1093	DI191	1127	DF7
	1026	DF14	1060	DF842	1094	DI207	1128	DF706
	1027	DF163	1061	DG1	1095	DI216	1129	DF713
	1028	DF174	1062	DG17	1096	DI243	1130	DF727
	1029	DF175	1063	DG174	1097	DI248	1131	DF737
10	1030	DF180	1064	DG256	1098	DI261	1132	DF756
	1031	DF185	1065	DG26	1099	DF1005	1133	DF757
	1032	DF201	1066	DG266	1100	DF1009	1134	DF762
	1033	DF202	1067	DG326	1101	DF1010	1135	DF776
	1034	DF203	1068	DG327	1102	DF102	1136	DF777
15	1035	DF206	1069	DG329	1103	DF1050	1137	DF780
	1036	DF219	1070	DG330	1104	DF1062	1138	DF783
	1037	DF230	1071	DG331	1105	DF1063	1139	DG12
	1038	DF232	1072	DG44	1106	DF1084	1140	DG121
	1039	DF239	1073	DG65	1107	DF153	1141	DG128
20	1040	DF244	1074	DG69	1108	DF218	1142	DG141
	1041	DF259	1075	DG7	1109	DF251	1143	DG149
	1042	DF266	1076	DG71	1110	DF280	1144	DH28
	1043	DF46	1077	DG76	1111	DF286	1145	DH303
	1044	DF65	1078	DG82	1112	DF316	1146	DH318
25	1045	DF69	1079	DH1086	1113	DF317	1147	DH322
	1046	DB145	1080	DH1098	1114	DF343	1148	DH340
	1047	DB150	1081	DH1135	1115	DF347	1149	DH371
	1048	DB159	1082	DH1145	1116	DF370	1150	DH40
	1049	DB174	1083	DH1153	1117	DF382	1151	DH401
30	1050	DB180	1084	DH1182	1118	DF396	1152	DH432
	1051	CY1	1085	DH1185	1119	DF428	1153	DH451
	1052	CY11	1086	DH1190	1120	DF453	1154	DH496
	1053	CY3	1087	DH1191	1121	DF457	1155	DH502
	1054	CY9	1088	DH1201	1122	DF460	1156	DH529

	1157	DH66	1191	DF915	1225	DH1357	1259	DI501
	1158	DF518	1192	DF948	1226	DH145	1260	DI504
	1159	DF521	1193	DF950	1227	DH999	1261	DK111
	1160	DF538	1194	DF956	1228	DI160	1262	DK113
5	1161	DF543	1195	DF966	1229	DI386	1263	DK120
	1162	DF545	1196	DF968	1230	DI391	1264	DK122
	1163	DF547	1197	DF971	1231	DI435	1265	DK126
	1164	DF568	1198	DF973	1232	DI448	1266	DK134
	1165	DF587	1199	DF979	1233	DI454	1267	DK136
10	1166	DF589	1200	DF984	1234	DJ109	1268	DK150
	1167	DF591	1201	DF989	1235	DJ146	1269	DK160
	1168	DF601	1202	DH1257	1236	DJ167	1270	DK170
	1169	DF606	1203	DH1308	1237	DF1065	1271	DK182
	1170	DF62	1204	DH1314	1238	DI387	1272	DK185
15	1171	DF620	1205	DI341	1239	DI393	1273	DK197
	1172	DF625	1206	DH1265	1240	DI403	1274	DK206
	1173	DF648	1207	DI349	1241	DI430	1275	DK219
	1174	DF657	1208	DI355	1242	DI438	1276	DK223
	1175	DF659	1209	DI362	1243	DJ2	1277	DK227
20	1176	DF661	1210	DI366	1244	DJ188	1278	DK229
	1177	DF662	1211	DI508	1245	DJ238	1279	DK230
	1178	DF670	1212	DI516	1246	DJ259	1280	DK243
	1179	DF674	1213	DI518	1247	DK64	1281	DK264
	1180	DF682	1214	DF1066	1248	DK70	1282	DK268
25	1181	DF688	1215	DF1069	1249	DK81	1283	DK31
	1182	DF810	1216	DG279	1250	DK84	1284	DK39
	1183	DF823	1217	DH1010	1251	DI462	1285	DK93
	1184	DF835	1218	DH1013	1252	DI466	1286	DL101
	1185	DF860	1219	DH1044	1253	DI474	1287	DL110
30	1186	DF877	1220	DH1045	1254	DI475	1288	DL116
	1187	DF883	1221	DH1073	1255	DI479	1289	DL132
	1188	DF895	1222	DH1078	1256	DI480	1290	DL63
	1189	DF909	1223	DH1340	1257	DI482	1291	DL82
	1190	DF910	1224	DH1349	1258	DI500	1292	DL95

	1293	DL99	1327	DL491	1361	DL547	1395	DO181
	1294	DJ332	1328	DL495	1362	DL550	1396	DO419
	1295	DJ362	1329	DL498	1363	DL551	1397	DO424
	1296	DK290	1330	DL504	1364	DL601	1398	DO440
5	1297	DK321	1331	DM118	1365	DL604	1399	DO447
	1298	DK324	1332	DM122	1366	DL605	1400	DO568
	1299	DK329	1333	DM126	1367	DL607	1401	DO575
	1300	DK357	1334	DM128	1368	DL608	1402	DO589
	1301	DK360	1335	DM130	1369	DL616	1403	DO610
10	1302	DL141	1336	DM147	1370	DL619	1404	DO715
	1303	DL146	1337	DM169	1371	DL620	1405	DO722
	1304	DL162	1338	DM26	1372	DL634	1406	DO737
	1305	DL163	1339	DM404	1373	DM194	1407	DO742
	1306	DL169	1340	DM406	1374	DM197	1408	DO755
15	1307	DL181	1341	DM407	1375	DM221	1409	DO765
	1308	DL185	1342	DM420	1376	DM248	1410	DO797
	1309	DL218	1343	DM425	1377	DM250	1411	DO836
	1310	DL220	1344	DM435	1378	DM262	1412	DO884
	1311	DL248	1345	DM445	1379	DM265	1413	DO896
20	1312	DL289	1346	DM449	1380	DM272	1414	CZ549
	1313	DL290	1347	DM459	1381	DM278	1415	CZ598
	1314	DL291	1348	DM462	1382	DM293	1416	DT431
	1315	DL316	1349	DM469	1383	DM303	1417	DT443
	1316	DL320	1350	DM482	1384	DM340	1418	DT446
25	1317	DL321	1351	DM6	1385	DM360	1419	DT449
	1318	DL425	1352	DM94	1386	DM365	1420	DT450
	1319	DL426	1353	DJ279	1387	DM522	1421	DT455
	1320	DL427	1354	DJ284	1388	DM533	1422	DT458
	1321	DL439	1355	DJ299	1389	DM542	1423	DN106
30	1322	DL440	1356	DJ319	1390	DM87	1424	DN153
	1323	DL444	1357	DJ323	1391	DN124	1425	DN176
	1324	DL457	1358	DL531	1392	DN144	1426	DT530
	1325	DL463	1359	DL535	1393	DN147	1427	DT534
	1326	DL466	1360	DL543	1394	DN167	1428	DT535

	1429	DT544	1463	DW1	1497	BK5
	1430	DT563	1464	DW389	1498	BK504
	1431	DT584	1465	DW398	1499	BK513
	1432	DT590	1466	DW654	1500	BK517
5	1433	DT596	1467	DW659		
	1434	DT597	1468	DW665		
	1435	DT598	1469	DW694		
	1436	DT640	1470	DW705		
	1437	DT655	1471	DW716		
10	1438	DT674	1472	DW749		
	1439	DT719	1473	DW761		
	1440	DT734	1474	DW765		
	1441	DT779	1475	DW771		
	1442	DT801	1476	DW78		
15	1443	DT802	1477	DW780		
	1444	DN696	1478	BK10		
	1445	DN697	1479	BK11		
	1446	DN704	1480	BK2		
	1447	DN710	1481	BK368		
20	1448	DN711	1482	BK373		
	1449	DN714	1483	BK374		
	1450	DN721	1484	BK375		
	1451	DN722	1485	BK384		
	1452	DN732	1486	BK402		
25	1453	DN740	1487	BK410		
	1454	DN746	1488	BK415		
	1455	DN747	1489	BK425		
	1456	DN753	1490	BK427		
	1457	DN756	1491	BK436		
30	1458	DN764	1492	BK445		
	1459	DN770	1493	BK455		
	1460	DN772	1494	BK458		
	1461	DN1120	1495	BK494		
	1462	DU372	1496	BK498		

The "Clone ID No." for a particular clone consists of one or two letters followed by a number. The letters designate the tissue source from which the sEST was isolated. Table 3 below lists the various sources which were run through applicants' signal sequence trap. Thus, the tissue source for a particular sEST sequence can be identified in Table 3 by the one and two letter designations used in the relevant "Clone ID No.". For example, a clone designated as "BA312" would have been isolated from a human placenta (26 yrs.) library (i.e., selection "BA") as indicated in Table 3.

As used herein, "polynucleotide" includes single- and double-stranded RNAs, DNAs and RNA:DNA hybrids.

As used herein a "secreted" protein is one which, when expressed in a suitable host cell, is transported across or through a membrane, including transport as a result of signal sequences in its amino acid sequence. "Secreted" proteins include without limitation proteins secreted wholly (e.g., soluble proteins) or partially (e.g., receptors) from the cell in which they are expressed. "Secreted" proteins also include without limitation proteins which are transported across the membrane of the endoplasmic reticulum.

Fragments of the proteins of the present invention which are capable of exhibiting biological activity are also encompassed by the present invention. Fragments of the protein may be in linear form or they may be cyclized using known methods, for example, as described in H.U. Saragovi, *et al.*, Bio/Technology 10, 773-778 (1992) and in R.S. McDowell, *et al.*, J. Amer. Chem. Soc. 114, 9245-9253 (1992), both of which are incorporated herein by reference. Such fragments may be fused to carrier molecules such as immunoglobulins for many purposes, including increasing the valency of protein binding sites. For example, fragments of the protein may be fused through "linker" sequences to the Fc portion of an immunoglobulin. For a bivalent form of the protein, such a fusion could be to the Fc portion of an IgG molecule. Other immunoglobulin isotypes may also be used to generate such fusions. For example, a protein - IgM fusion would generate a decavalent form of the protein of the invention.

The present invention also provides both full-length and mature forms of the disclosed proteins. The full-length form of the such proteins is identified in the sequence listing by translation of the nucleotide sequence of each disclosed clone. The mature form of such protein may be obtained by expression of the disclosed full-length polynucleotide (preferably those deposited with ATCC) in a suitable mammalian cell or other host cell. The sequence of the mature form of the protein may also be determinable from the amino acid sequence of the full-length form.

The present invention also provides genes corresponding to the cDNA sequences disclosed herein. The corresponding genes can be isolated in accordance with known methods using the sequence information disclosed herein. Such methods include the preparation of probes or primers from the disclosed sequence information for identification  
5 and/or amplification of genes in appropriate genomic libraries or other sources of genomic materials.

Where the protein of the present invention is membrane-bound (e.g., is a receptor), the present invention also provides for soluble forms of such protein. In such forms part or all of the intracellular and transmembrane domains of the protein are deleted such that  
10 the protein is fully secreted from the cell in which it is expressed. The intracellular and transmembrane domains of proteins of the invention can be identified in accordance with known techniques for determination of such domains from sequence information.

Species homologs of the disclosed polynucleotides and proteins are also provided by the present invention. Species homologs may be isolated and identified by making  
15 suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source from the desired species.

The invention also encompasses allelic variants of the disclosed polynucleotides or proteins; that is, naturally-occurring alternative forms of the isolated polynucleotide which also encode proteins which are identical, homologous or related to that encoded by the  
20 polynucleotides disclosed herein.

The invention also includes polynucleotides with sequences complementary to those of the polynucleotides disclosed herein.

The present invention also includes polynucleotides capable of hybridizing, preferably under reduced stringency conditions, more preferably under stringent conditions,  
25 most preferably under highly stringent conditions, to polynucleotides described herein. Examples of stringency conditions are shown in Table 1 below: highly stringent conditions are those that are at least as stringent as, for example, conditions A-F; stringent conditions are at least as stringent as, for example, conditions G-L; and reduced stringency conditions are at least as stringent as, for example, conditions M-R.

Table 1

	Stringency Condition	Polynucleotide Hybrid	Hybrid Length (bp) <sup>‡</sup>	Hybridization Temperature and Buffer <sup>†</sup>	Wash Temperature and Buffer <sup>†</sup>
5	A	DNA:DNA	≥ 50	65°C; 1xSSC -or- 42°C; 1xSSC, 50% formamide	65°C; 0.3xSSC
	B	DNA:DNA	< 50	T <sub>B</sub> *; 1xSSC	T <sub>B</sub> *; 1xSSC
	C	DNA:RNA	≥ 50	67°C; 1xSSC -or- 45°C; 1xSSC, 50% formamide	67°C; 0.3xSSC
	D	DNA:RNA	< 50	T <sub>D</sub> *; 1xSSC	T <sub>D</sub> *; 1xSSC
	E	RNA:RNA	≥ 50	70°C; 1xSSC -or- 50°C; 1xSSC, 50% formamide	70°C; 0.3xSSC
10	F	RNA:RNA	< 50	T <sub>F</sub> *; 1xSSC	T <sub>F</sub> *; 1xSSC
	G	DNA:DNA	≥ 50	65°C; 4xSSC -or- 42°C; 4xSSC, 50% formamide	65°C; 1xSSC
	H	DNA:DNA	< 50	T <sub>H</sub> *; 4xSSC	T <sub>H</sub> *; 4xSSC
	I	DNA:RNA	≥ 50	67°C; 4xSSC -or- 45°C; 4xSSC, 50% formamide	67°C; 1xSSC
	J	DNA:RNA	< 50	T <sub>J</sub> *; 4xSSC	T <sub>J</sub> *; 4xSSC
15	K	RNA:RNA	≥ 50	70°C; 4xSSC -or- 50°C; 4xSSC, 50% formamide	67°C; 1xSSC
	L	RNA:RNA	< 50	T <sub>L</sub> *; 2xSSC	T <sub>L</sub> *; 2xSSC
	M	DNA:DNA	≥ 50	50°C; 4xSSC -or- 40°C; 6xSSC, 50% formamide	50°C; 2xSSC
	N	DNA:DNA	< 50	T <sub>N</sub> *; 6xSSC	T <sub>N</sub> *; 6xSSC
	O	DNA:RNA	≥ 50	55°C; 4xSSC -or- 42°C; 6xSSC, 50% formamide	55°C; 2xSSC
20	P	DNA:RNA	< 50	T <sub>P</sub> *; 6xSSC	T <sub>P</sub> *; 6xSSC
	Q	RNA:RNA	≥ 50	60°C; 4xSSC -or- 45°C; 6xSSC, 50% formamide	60°C; 2xSSC
	R	RNA:RNA	< 50	T <sub>R</sub> *; 4xSSC	T <sub>R</sub> *; 4xSSC

<sup>‡</sup>: The hybrid length is that anticipated for the hybridized region(s) of the hybridizing polynucleotides. When hybridizing a polynucleotide to a target polynucleotide of unknown sequence, the hybrid length is assumed to be that of the hybridizing polynucleotide. When polynucleotides of known sequence are hybridized, the hybrid length can be determined by aligning the sequences of the polynucleotides and identifying the region or regions of optimal sequence complementarity.

<sup>†</sup>: SSPE (1xSSPE is 0.15M NaCl, 10mM NaH<sub>2</sub>PO<sub>4</sub>, and 1.25mM EDTA, pH 7.4) can be substituted for SSC (1xSSC is 0.15M NaCl and 15mM sodium citrate) in the hybridization and wash buffers; washes are performed for 15 minutes after hybridization is complete.

\*T<sub>B</sub> - T<sub>R</sub>: The hybridization temperature for hybrids anticipated to be less than 50 base pairs in length should be 5-10°C less than the melting temperature (T<sub>m</sub>) of the hybrid, where T<sub>m</sub> is determined according to the following equations. For hybrids less than 18 base pairs in length, T<sub>m</sub>(°C) = 2(# of A + T bases) + 4(# of G + C bases). For hybrids between 18 and 49 base pairs in length, T<sub>m</sub>(°C) = 81.5 + 16.6(log [Na<sup>+</sup>]) + 0.41(%G+C) - (600/N), where N is the number of bases in the hybrid, and [Na<sup>+</sup>] is the concentration of sodium ions in the hybridization buffer ([Na<sup>+</sup>] for 1xSSC = 0.165 M).

Additional examples of stringency conditions for polynucleotide hybridization are provided in Sambrook, J., E.F. Fritsch, and T. Maniatis, 1989, *Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, chapters 9 and 11, and *Current Protocols in Molecular Biology*, 1995, F.M. Ausubel et al., eds., John Wiley & Sons, Inc., sections 2.10 and 6.3-6.4, incorporated herein by reference.

Preferably, such hybridizing polynucleotides have at least 70% sequence identity (more preferably, at least 80% identity; most preferably at least 90% or 95% identity) with the polynucleotide of the present invention to which they hybridize, where sequence identity is determined by comparing the sequences of the hybridizing polynucleotides when aligned so as to maximize overlap and identity while minimizing sequence gaps. ~~The isolated~~ polynucleotide encoding the protein of the invention may be operably linked to an expression control sequence such as the pMT2 or pED expression vectors disclosed in Kaufman *et al.*, *Nucleic Acids Res.* 19, 4485-4490 (1991), in order to produce the protein recombinantly. Many suitable expression control sequences are known in the art. General methods of expressing recombinant proteins are also known and are exemplified in R. Kaufman, *Methods in Enzymology* 185, 537-566 (1990). As defined herein "operably linked" means that the isolated polynucleotide of the invention and an expression control



sequence are situated within a vector or cell in such a way that the protein is expressed by a host cell which has been transformed (transfected) with the ligated polynucleotide/expression control sequence.

5 A number of types of cells may act as suitable host cells for expression of the protein. Mammalian host cells include, for example, monkey COS cells, Chinese Hamster Ovary (CHO) cells, human kidney 293 cells, human epidermal A431 cells, human Colo205 cells, 3T3 cells, CV-1 cells, other transformed primate cell lines, normal diploid cells, cell strains derived from *in vitro* culture of primary tissue, primary explants, HeLa cells, mouse L cells, BHK, HL-60, U937, HaK or Jurkat cells.

10 Alternatively, it may be possible to produce the protein in lower eukaryotes such as yeast or in prokaryotes such as bacteria. Potentially suitable yeast strains include *Saccharomyces cerevisiae*, *Schizosaccharomyces pombe*, *Kluyveromyces* strains, *Candida*, or any yeast strain capable of expressing heterologous proteins. Potentially suitable bacterial strains include *Escherichia coli*, *Bacillus subtilis*, *Salmonella typhimurium*, or any  
15 bacterial strain capable of expressing heterologous proteins. If the protein is made in yeast or bacteria, it may be necessary to modify the protein produced therein, for example by phosphorylation or glycosylation of the appropriate sites, in order to obtain the functional protein. Such covalent attachments may be accomplished using known chemical or enzymatic methods.

20 The protein may also be produced by operably linking the isolated polynucleotide of the invention to suitable control sequences in one or more insect expression vectors, and employing an insect expression system. Materials and methods for baculovirus/insect cell expression systems are commercially available in kit form from, *e.g.*, Invitrogen, San Diego, California, U.S.A. (the MaxBac® kit), and such methods are well known in the art, as described in Summers and Smith, Texas Agricultural Experiment Station Bulletin No. 1555 (1987), incorporated herein by reference. As used herein, an insect cell capable of  
25 expressing a polynucleotide of the present invention is "transformed."

The protein of the invention may be prepared by culturing transformed host cells under culture conditions suitable to express the recombinant protein. The resulting  
30 expressed protein may then be purified from such culture (*i.e.*, from culture medium or cell extracts) using known purification processes, such as gel filtration and ion exchange chromatography. The purification of the protein may also include an affinity column containing agents which will bind to the protein; one or more column steps over such affinity resins as concanavalin A-agarose, heparin-toyopearl® or Cibacrom blue 3GA

Sepharose®; one or more steps involving hydrophobic interaction chromatography using such resins as phenyl ether, butyl ether, or propyl ether; or immunoaffinity chromatography.

Alternatively, the protein of the invention may also be expressed in a form which will facilitate purification. For example, it may be expressed as a fusion protein, such as those of maltose binding protein (MBP), glutathione-S-transferase (GST) or thioredoxin (TRX). Kits for expression and purification of such fusion proteins are commercially available from New England BioLab (Beverly, MA), Pharmacia (Piscataway, NJ) and InVitrogen, respectively. The protein can also be tagged with an epitope and subsequently purified by using a specific antibody directed to such epitope. One such epitope ("Flag") is commercially available from Kodak (New Haven, CT).

Finally, one or more reverse-phase high performance liquid chromatography (RP-HPLC) steps employing hydrophobic RP-HPLC media, e.g., silica gel having pendant methyl or other aliphatic groups, can be employed to further purify the protein. Some or all of the foregoing purification steps, in various combinations, can also be employed to provide a substantially homogeneous isolated recombinant protein. The protein thus purified is substantially free of other mammalian proteins and is defined in accordance with the present invention as an "isolated protein."

The protein of the invention may also be expressed as a product of transgenic animals, e.g., as a component of the milk of transgenic cows, goats, pigs, or sheep which are characterized by somatic or germ cells containing a nucleotide sequence encoding the protein.

The protein may also be produced by known conventional chemical synthesis. Methods for constructing the proteins of the present invention by synthetic means are known to those skilled in the art. The synthetically-constructed protein sequences, by virtue of sharing primary, secondary or tertiary structural and/or conformational characteristics with proteins may possess biological properties in common therewith, including protein activity. Thus, they may be employed as biologically active or immunological substitutes for natural, purified proteins in screening of therapeutic compounds and in immunological processes for the development of antibodies.

The proteins provided herein also include proteins characterized by amino acid sequences similar to those of purified proteins but into which modification are naturally provided or deliberately engineered. For example, modifications in the peptide or DNA sequences can be made by those skilled in the art using known techniques. Modifications

of interest in the protein sequences may include the alteration, substitution, replacement, insertion or deletion of a selected amino acid residue in the coding sequence. For example, one or more of the cysteine residues may be deleted or replaced with another amino acid to alter the conformation of the molecule. Techniques for such alteration, substitution, replacement, insertion or deletion are well known to those skilled in the art (see, e.g., U.S. Patent No. 4,518,584). Preferably, such alteration, substitution, replacement, insertion or deletion retains the desired activity of the protein.

Other fragments and derivatives of the sequences of proteins which would be expected to retain protein activity in whole or in part and may thus be useful for screening or other immunological methodologies may also be easily made by those skilled in the art given the disclosures herein. Such modifications are believed to be encompassed by the present invention.

### USES AND BIOLOGICAL ACTIVITY

The polynucleotides and proteins of the present invention are expected to exhibit one or more of the uses or biological activities (including those associated with assays cited herein) identified below. Uses or activities described for proteins of the present invention  
5 may be provided by administration or use of such proteins or by administration or use of polynucleotides encoding such proteins (such as, for example, in gene therapies or vectors suitable for introduction of DNA).

#### Research Uses and Utilities

10 The polynucleotides provided by the present invention can be used by the research community for various purposes. The primary use of polynucleotides of the invention which are sESTs is as probes for the identification and isolation of full-length cDNAs and genomic DNA molecules which correspond (i.e., is a longer polynucleotide sequence of which substantially the entire sEST is a fragment in the case of a full-length cDNA, or  
15 which encodes the sEST in the case of a genomic DNA molecule) to such sESTs. Techniques for use of such sequences as probes for larger cDNAs or genomic molecules are well known in the art.

The polynucleotides can also be used to express recombinant protein for analysis, characterization or therapeutic use; as markers for tissues in which the corresponding  
20 protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in disease states); as molecular weight markers on Southern gels; as chromosome markers or tags (when labeled) to identify chromosomes or to map related gene positions; to compare with endogenous DNA sequences in patients to identify potential genetic disorders; as probes to hybridize and thus discover novel, related  
25 DNA sequences; as a source of information to derive PCR primers for genetic fingerprinting; as a probe to "subtract-out" known sequences in the process of discovering other novel polynucleotides; for selecting and making oligomers for attachment to a "gene chip" or other support, including for examination of expression patterns; to raise anti-protein antibodies using DNA immunization techniques; and as an antigen to raise anti-  
30 DNA antibodies or elicit another immune response. Where the polynucleotide encodes a protein which binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the polynucleotide can also be used in interaction trap assays (such as, for example, that described in Gyuris et al., Cell 75:791-803 (1993)) to identify

polynucleotides encoding the other protein with which binding occurs or to identify inhibitors of the binding interaction.

The proteins provided by the present invention can similarly be used in assay to determine biological activity, including in a panel of multiple proteins for high-throughput screening; to raise antibodies or to elicit another immune response; as a reagent (including the labeled reagent) in assays designed to quantitatively determine levels of the protein (or its receptor) in biological fluids; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in a disease state); and, of course, to isolate correlative receptors or ligands. Where the protein binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the protein can be used to identify the other protein with which binding occurs or to identify inhibitors of the binding interaction. Proteins involved in these binding interactions can also be used to screen for peptide or small molecule inhibitors or agonists of the binding interaction.

Any or all of these research utilities are capable of being developed into reagent grade or kit format for commercialization as research products.

Methods for performing the uses listed above are well known to those skilled in the art. References disclosing such methods include without limitation "Molecular Cloning: A Laboratory Manual", 2d ed., Cold Spring Harbor Laboratory Press, Sambrook, J., E.F. Fritsch and T. Maniatis eds., 1989, and "Methods in Enzymology: Guide to Molecular Cloning Techniques", Academic Press, Berger, S.L. and A.R. Kimmel eds., 1987.

#### Nutritional Uses

Polynucleotides and proteins of the present invention can also be used as nutritional sources or supplements. Such uses include without limitation use as a protein or amino acid supplement, use as a carbon source, use as a nitrogen source and use as a source of carbohydrate. In such cases the protein or polynucleotide of the invention can be added to the feed of a particular organism or can be administered as a separate solid or liquid preparation, such as in the form of powder, pills, solutions, suspensions or capsules. In the case of microorganisms, the protein or polynucleotide of the invention can be added to the medium in or on which the microorganism is cultured.

#### Cytokine and Cell Proliferation/Differentiation Activity

A protein of the present invention may exhibit cytokine, cell proliferation (either inducing or inhibiting) or cell differentiation (either inducing or inhibiting) activity or may induce production of other cytokines in certain cell populations. Many protein factors discovered to date, including all known cytokines, have exhibited activity in one or more factor dependent cell proliferation assays, and hence the assays serve as a convenient confirmation of cytokine activity. The activity of a protein of the present invention is evidenced by any one of a number of routine factor dependent cell proliferation assays for cell lines including, without limitation, 32D, DA2, DA1G, T10, B9, B9/11, BaF3, MC9/G, M+ (preB M+), 2E8, RB5, DA1, 123, T1165, HT2, CTLL2, TF-1, Mo7e and CMK.

10 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for T-cell or thymocyte proliferation include without limitation those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, *Immunologic studies in Humans*); Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bertagnolli et al., *J. Immunol.* 145:1706-1712, 1990; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Bertagnolli, et al., *J. Immunol.* 149:3778-3783, 1992; Bowman et al., *J. Immunol.* 152: 1756-1761, 1994.

20 Assays for cytokine production and/or proliferation of spleen cells, lymph node cells or thymocytes include, without limitation, those described in: Polyclonal T cell stimulation, Kruisbeek, A.M. and Shevach, E.M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.12.1-3.12.14, John Wiley and Sons, Toronto. 1994; and Measurement of mouse and human Interferon  $\gamma$ , Schreiber, R.D. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.8.1-6.8.8, John Wiley and Sons, Toronto. 1994.

30 Assays for proliferation and differentiation of hematopoietic and lymphopoietic cells include, without limitation, those described in: Measurement of Human and Murine Interleukin 2 and Interleukin 4, Bottomly, K., Davis, L.S. and Lipsky, P.E. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.3.1-6.3.12, John Wiley and Sons, Toronto. 1991; deVries et al., *J. Exp. Med.* 173:1205-1211, 1991; Moreau et al., *Nature* 336:690-692, 1988; Greenberger et al., *Proc. Natl. Acad. Sci. U.S.A.* 80:2931-2938, 1983; Measurement of mouse and human interleukin 6 - Nordan, R. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.6.1-6.6.5, John Wiley

- and Sons, Toronto. 1991; Smith et al., Proc. Natl. Acad. Sci. U.S.A. 83:1857-1861, 1986; Measurement of human Interleukin 11 - Bennett, F., Giannotti, J., Clark, S.C. and Turner, K. J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.15.1 John Wiley and Sons, Toronto. 1991; Measurement of mouse and human Interleukin 9 -
- 5 Ciarletta, A., Giannotti, J., Clark, S.C. and Turner, K.J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.13.1, John Wiley and Sons, Toronto. 1991.

- Assays for T-cell clone responses to antigens (which will identify, among others, proteins that affect APC-T cell interactions as well as direct T-cell effects by measuring proliferation and cytokine production) include, without limitation, those described in:
- 10 *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function; Chapter 6, Cytokines and their cellular receptors; Chapter 7, Immunologic studies in Humans); Weinberger et al., Proc. Natl. Acad. Sci. USA 77:6091-6095, 1980; Weinberger et al., Eur. J. Immun.
- 15 11:405-411, 1981; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988.

#### Immune Stimulating or Suppressing Activity

- A protein of the present invention may also exhibit immune stimulating or immune
- 20 suppressing activity, including without limitation the activities for which assays are described herein. A protein may be useful in the treatment of various immune deficiencies and disorders (including severe combined immunodeficiency (SCID)), e.g., in regulating (up or down) growth and proliferation of T and/or B lymphocytes, as well as effecting the cytolytic activity of NK cells and other cell populations. These immune deficiencies may
- 25 be genetic or be caused by viral (e.g., HIV) as well as bacterial or fungal infections, or may result from autoimmune disorders. More specifically, infectious diseases caused by viral, bacterial, fungal or other infection may be treatable using a protein of the present invention, including infections by HIV, hepatitis viruses, herpesviruses, mycobacteria, Leishmania spp., malaria spp. and various fungal infections such as candidiasis. Of course,
- 30 in this regard, a protein of the present invention may also be useful where a boost to the immune system generally may be desirable, *i.e.*, in the treatment of cancer.

Autoimmune disorders which may be treated using a protein of the present invention include, for example, connective tissue disease, multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, autoimmune pulmonary inflammation, Guillain-Barre

syndrome, autoimmune thyroiditis, insulin dependent diabetes mellitus, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. Such a protein of the present invention may also be useful in the treatment of allergic reactions and conditions, such as asthma (particularly allergic asthma) or other respiratory problems. Other  
5 conditions, in which immune suppression is desired (including, for example, organ transplantation), may also be treatable using a protein of the present invention.

Using the proteins of the invention it may also be possible to immune responses, in a number of ways. Down regulation may be in the form of inhibiting or blocking an immune response already in progress or may involve preventing the induction of an immune  
10 response. The functions of activated T cells may be inhibited by suppressing T cell responses or by inducing specific tolerance in T cells, or both. Immunosuppression of T cell responses is generally an active, non-antigen-specific, process which requires continuous exposure of the T cells to the suppressive agent. Tolerance, which involves inducing non-responsiveness or anergy in T cells, is distinguishable from  
15 immunosuppression in that it is generally antigen-specific and persists after exposure to the tolerizing agent has ceased. Operationally, tolerance can be demonstrated by the lack of a T cell response upon reexposure to specific antigen in the absence of the tolerizing agent.

Down regulating or preventing one or more antigen functions (including without limitation B lymphocyte antigen functions (such as , for example, B7)), *e.g.*, preventing  
20 high level lymphokine synthesis by activated T cells, will be useful in situations of tissue, skin and organ transplantation and in graft-versus-host disease (GVHD). For example, blockage of T cell function should result in reduced tissue destruction in tissue transplantation. Typically, in tissue transplants, rejection of the transplant is initiated through its recognition as foreign by T cells, followed by an immune reaction that destroys  
25 the transplant. The administration of a molecule which inhibits or blocks interaction of a B7 lymphocyte antigen with its natural ligand(s) on immune cells (such as a soluble, monomeric form of a peptide having B7-2 activity alone or in conjunction with a monomeric form of a peptide having an activity of another B lymphocyte antigen (*e.g.*, B7-1, B7-3) or blocking antibody), prior to transplantation can lead to the binding of the  
30 molecule to the natural ligand(s) on the immune cells without transmitting the corresponding costimulatory signal. Blocking B lymphocyte antigen function in this matter prevents cytokine synthesis by immune cells, such as T cells, and thus acts as an immunosuppressant. Moreover, the lack of costimulation may also be sufficient to anergize the T cells, thereby inducing tolerance in a subject. Induction of long-term tolerance by B lymphocyte antigen-



blocking reagents may avoid the necessity of repeated administration of these blocking reagents. To achieve sufficient immunosuppression or tolerance in a subject, it may also be necessary to block the function of a combination of B lymphocyte antigens.

5 The efficacy of particular blocking reagents in preventing organ transplant rejection or GVHD can be assessed using animal models that are predictive of efficacy in humans. Examples of appropriate systems which can be used include allogeneic cardiac grafts in rats and xenogeneic pancreatic islet cell grafts in mice, both of which have been used to examine the immunosuppressive effects of CTLA4Ig fusion proteins *in vivo* as described in Lenschow *et al.*, Science 257:789-792 (1992) and Turka *et al.*, Proc. Natl. Acad. Sci.  
10 USA, 89:11102-11105 (1992). In addition, murine models of GVHD (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 846-847) can be used to determine the effect of blocking B lymphocyte antigen function *in vivo* on the development of that disease.

Blocking antigen function may also be therapeutically useful for treating  
15 autoimmune diseases. Many autoimmune disorders are the result of inappropriate activation of T cells that are reactive against self tissue and which promote the production of cytokines and autoantibodies involved in the pathology of the diseases. Preventing the activation of autoreactive T cells may reduce or eliminate disease symptoms. Administration of reagents which block costimulation of T cells by disrupting receptor:ligand interactions of B  
20 lymphocyte antigens can be used to inhibit T cell activation and prevent production of autoantibodies or T cell-derived cytokines which may be involved in the disease process. Additionally, blocking reagents may induce antigen-specific tolerance of autoreactive T cells which could lead to long-term relief from the disease. The efficacy of blocking reagents in preventing or alleviating autoimmune disorders can be determined using a number of  
25 well-characterized animal models of human autoimmune diseases. Examples include murine experimental autoimmune encephalitis, systemic lupus erythematosus in MRL/lpr/lpr mice or NZB hybrid mice, murine autoimmune collagen arthritis, diabetes mellitus in NOD mice and BB rats, and murine experimental myasthenia gravis (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 840-856).

30 Upregulation of an antigen function (preferably a B lymphocyte antigen function), as a means of up regulating immune responses, may also be useful in therapy. Upregulation of immune responses may be in the form of enhancing an existing immune response or eliciting an initial immune response. For example, enhancing an immune response through stimulating B lymphocyte antigen function may be useful in cases of viral

infection. In addition, systemic viral diseases such as influenza, the common cold, and encephalitis might be alleviated by the administration of stimulatory forms of B lymphocyte antigens systemically.

Alternatively, anti-viral immune responses may be enhanced in an infected patient  
5 by removing T cells from the patient, costimulating the T cells *in vitro* with viral antigen-pulsed APCs either expressing a peptide of the present invention or together with a stimulatory form of a soluble peptide of the present invention and reintroducing the *in vitro* activated T cells into the patient. Another method of enhancing anti-viral immune responses would be to isolate infected cells from a patient, transfect them with a nucleic acid encoding  
10 a protein of the present invention as described herein such that the cells express all or a portion of the protein on their surface, and reintroduce the transfected cells into the patient. The infected cells would now be capable of delivering a costimulatory signal to, and thereby activate, T cells *in vivo*.

In another application, up regulation or enhancement of antigen function (preferably  
15 B lymphocyte antigen function) may be useful in the induction of tumor immunity. Tumor cells (*e.g.*, sarcoma, melanoma, lymphoma, leukemia, neuroblastoma, carcinoma) transfected with a nucleic acid encoding at least one peptide of the present invention can be administered to a subject to overcome tumor-specific tolerance in the subject. If desired, the tumor cell can be transfected to express a combination of peptides. For example, tumor  
20 cells obtained from a patient can be transfected *ex vivo* with an expression vector directing the expression of a peptide having B7-2-like activity alone, or in conjunction with a peptide having B7-1-like activity and/or B7-3-like activity. The transfected tumor cells are returned to the patient to result in expression of the peptides on the surface of the transfected cell. Alternatively, gene therapy techniques can be used to target a tumor cell for transfection  
25 *in vivo*.

The presence of the peptide of the present invention having the activity of a B lymphocyte antigen(s) on the surface of the tumor cell provides the necessary costimulation signal to T cells to induce a T cell mediated immune response against the transfected tumor cells. In addition, tumor cells which lack MHC class I or MHC class II molecules, or  
30 which fail to reexpress sufficient amounts of MHC class I or MHC class II molecules, can be transfected with nucleic acid encoding all or a portion of (*e.g.*, a cytoplasmic-domain truncated portion) of an MHC class I  $\alpha$  chain protein and  $\beta_2$  microglobulin protein or an MHC class II  $\alpha$  chain protein and an MHC class II  $\beta$  chain protein to thereby express MHC class I or MHC class II proteins on the cell surface. Expression of the appropriate class I

or class II MHC in conjunction with a peptide having the activity of a B lymphocyte antigen (e.g., B7-1, B7-2, B7-3) induces a T cell mediated immune response against the transfected tumor cell. Optionally, a gene encoding an antisense construct which blocks expression of an MHC class II associated protein, such as the invariant chain, can also be cotransfected  
5 with a DNA encoding a peptide having the activity of a B lymphocyte antigen to promote presentation of tumor associated antigens and induce tumor specific immunity. Thus, the induction of a T cell mediated immune response in a human subject may be sufficient to overcome tumor-specific tolerance in the subject.

The activity of a protein of the invention may, among other means, be measured  
10 by the following methods:

Suitable assays for thymocyte or splenocyte cytotoxicity include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-  
15 3.19; Chapter 7, *Immunologic studies in Humans*); Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Takai et al., *J. Immunol.* 140:508-512, 1988; Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa  
20 et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bowman et al., *J. Virology* 61:1992-1998; Takai et al., *J. Immunol.* 140:508-512, 1988; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Brown et al., *J. Immunol.* 153:3079-3092, 1994.

Assays for T-cell-dependent immunoglobulin responses and isotype switching  
25 (which will identify, among others, proteins that modulate T-cell dependent antibody responses and that affect Th1/Th2 profiles) include, without limitation, those described in: Maliszewski, *J. Immunol.* 144:3028-3033, 1990; and Assays for B cell function: *In vitro* antibody production, Mond, J.J. and Brunswick, M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.8.1-3.8.16, John Wiley and Sons, Toronto. 1994.

30 Mixed lymphocyte reaction (MLR) assays (which will identify, among others, proteins that generate predominantly Th1 and CTL responses) include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-

3.19; Chapter 7, Immunologic studies in Humans); Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., J. Immunol. 149:3778-3783, 1992.

Dendritic cell-dependent assays (which will identify, among others, proteins expressed by dendritic cells that activate naive T-cells) include, without limitation, those described in: Guery et al., J. Immunol. 134:536-544, 1995; Inaba et al., Journal of Experimental Medicine 173:549-559, 1991; Macatonia et al., Journal of Immunology 154:5071-5079, 1995; Porgador et al., Journal of Experimental Medicine 182:255-260, 1995; Nair et al., Journal of Virology 67:4062-4069, 1993; Huang et al., Science 264:961-965, 1994; Macatonia et al., Journal of Experimental Medicine 169:1255-1264, 1989; Bhardwaj et al., Journal of Clinical Investigation 94:797-807, 1994; and Inaba et al., Journal of Experimental Medicine 172:631-640, 1990.

Assays for lymphocyte survival/apoptosis (which will identify, among others, proteins that prevent apoptosis after superantigen induction and proteins that regulate lymphocyte homeostasis) include, without limitation, those described in: Darzynkiewicz et al., Cytometry 13:795-808, 1992; Gorczyca et al., Leukemia 7:659-670, 1993; Gorczyca et al., Cancer Research 53:1945-1951, 1993; Itoh et al., Cell 66:233-243, 1991; Zacharchuk, Journal of Immunology 145:4037-4045, 1990; Zamai et al., Cytometry 14:891-897, 1993; Gorczyca et al., International Journal of Oncology 1:639-648, 1992.

Assays for proteins that influence early steps of T-cell commitment and development include, without limitation, those described in: Antica et al., Blood 84:111-117, 1994; Fine et al., Cellular Immunology 155:111-122, 1994; Galy et al., Blood 85:2770-2778, 1995; Toki et al., Proc. Nat. Acad Sci. USA 88:7548-7551, 1991.

#### Hematopoiesis Regulating Activity

A protein of the present invention may be useful in regulation of hematopoiesis and, consequently, in the treatment of myeloid or lymphoid cell deficiencies. Even marginal biological activity in support of colony forming cells or of factor-dependent cell lines indicates involvement in regulating hematopoiesis, e.g. in supporting the growth and proliferation of erythroid progenitor cells alone or in combination with other cytokines, thereby indicating utility, for example, in treating various anemias or for use in conjunction with irradiation/chemotherapy to stimulate the production of erythroid precursors and/or erythroid cells; in supporting the growth and proliferation of myeloid cells such as granulocytes and monocytes/macrophages (i.e., traditional CSF activity) useful, for

example, in conjunction with chemotherapy to prevent or treat consequent myelo-suppression; in supporting the growth and proliferation of megakaryocytes and consequently of platelets thereby allowing prevention or treatment of various platelet disorders such as thrombocytopenia, and generally for use in place of or complimentary to platelet  
5 transfusions; and/or in supporting the growth and proliferation of hematopoietic stem cells which are capable of maturing to any and all of the above-mentioned hematopoietic cells and therefore find therapeutic utility in various stem cell disorders (such as those usually treated with transplantation, including, without limitation, aplastic anemia and paroxysmal nocturnal hemoglobinuria), as well as in repopulating the stem cell compartment post  
10 irradiation/chemotherapy, either *in-vivo* or *ex-vivo* (i.e., in conjunction with bone marrow transplantation or with peripheral progenitor cell transplantation (homologous or heterologous)) as normal cells or genetically manipulated for gene therapy.

The activity of a protein of the invention may, among other means, be measured by the following methods:

15 Suitable assays for proliferation and differentiation of various hematopoietic lines are cited above.

Assays for embryonic stem cell differentiation (which will identify, among others, proteins that influence embryonic differentiation hematopoiesis) include, without limitation, those described in: Johansson et al. *Cellular Biology* 15:141-151, 1995; Keller et al.,  
20 *Molecular and Cellular Biology* 13:473-486, 1993; McClanahan et al., *Blood* 81:2903-2915, 1993.

Assays for stem cell survival and differentiation (which will identify, among others, proteins that regulate lympho-hematopoiesis) include, without limitation, those described in: Methylcellulose colony forming assays, Freshney, M.G. In *Culture of Hematopoietic*  
25 *Cells*. R.I. Freshney, et al. eds. Vol pp. 265-268, Wiley-Liss, Inc., New York, NY. 1994; Hirayama et al., *Proc. Natl. Acad. Sci. USA* 89:5907-5911, 1992; Primitive hematopoietic colony forming cells with high proliferative potential, McNiece, I.K. and Briddell, R.A. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 23-39, Wiley-Liss, Inc., New York, NY. 1994; Neben et al., *Experimental Hematology* 22:353-359, 1994;  
30 Cobblestone area forming cell assay, Ploemacher, R.E. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 1-21, Wiley-Liss, Inc., New York, NY. 1994; Long term bone marrow cultures in the presence of stromal cells, Spooncer, E., Dexter, M. and Allen, T. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 163-179, Wiley-Liss, Inc., New York, NY. 1994; Long term culture initiating cell assay, Sutherland,

H.J. In *Culture of Hematopoietic Cells*. R.I. Freshney, *et al.* eds. Vol pp. 139-162, Wiley-Liss, Inc., New York, NY. 1994.

#### Tissue Growth Activity

5           A protein of the present invention also may have utility in compositions used for bone, cartilage, tendon, ligament and/or nerve tissue growth or regeneration, as well as for wound healing and tissue repair and replacement, and in the treatment of burns, incisions and ulcers.

10           A protein of the present invention, which induces cartilage and/or bone growth in circumstances where bone is not normally formed, has application in the healing of bone fractures and cartilage damage or defects in humans and other animals. Such a preparation employing a protein of the invention may have prophylactic use in closed as well as open fracture reduction and also in the improved fixation of artificial joints. *De novo* bone formation induced by an osteogenic agent contributes to the repair of congenital, trauma  
15 induced, or oncologic resection induced craniofacial defects, and also is useful in cosmetic plastic surgery.

          A protein of this invention may also be used in the treatment of periodontal disease, and in other tooth repair processes. Such agents may provide an environment to attract bone-forming cells, stimulate growth of bone-forming cells or induce differentiation of  
20 progenitors of bone-forming cells. A protein of the invention may also be useful in the treatment of osteoporosis or osteoarthritis, such as through stimulation of bone and/or cartilage repair or by blocking inflammation or processes of tissue destruction (collagenase activity, osteoclast activity, etc.) mediated by inflammatory processes.

          Another category of tissue regeneration activity that may be attributable to the  
25 protein of the present invention is tendon/ligament formation. A protein of the present invention, which induces tendon/ligament-like tissue or other tissue formation in circumstances where such tissue is not normally formed, has application in the healing of tendon or ligament tears, deformities and other tendon or ligament defects in humans and other animals. Such a preparation employing a tendon/ligament-like tissue inducing protein  
30 may have prophylactic use in preventing damage to tendon or ligament tissue, as well as use in the improved fixation of tendon or ligament to bone or other tissues, and in repairing defects to tendon or ligament tissue. *De novo* tendon/ligament-like tissue formation induced by a composition of the present invention contributes to the repair of congenital, trauma induced, or other tendon or ligament defects of other origin, and is also useful in cosmetic

plastic surgery for attachment or repair of tendons or ligaments. The compositions of the present invention may provide an environment to attract tendon- or ligament-forming cells, stimulate growth of tendon- or ligament-forming cells, induce differentiation of progenitors of tendon- or ligament-forming cells, or induce growth of tendon/ligament cells or  
5 progenitors *ex vivo* for return *in vivo* to effect tissue repair. The compositions of the invention may also be useful in the treatment of tendinitis, carpal tunnel syndrome and other tendon or ligament defects. The compositions may also include an appropriate matrix and/or sequestering agent as a carrier as is well known in the art.

The protein of the present invention may also be useful for proliferation of neural  
10 cells and for regeneration of nerve and brain tissue, *i.e.* for the treatment of central and peripheral nervous system diseases and neuropathies, as well as mechanical and traumatic disorders, which involve degeneration, death or trauma to neural cells or nerve tissue. More specifically, a protein may be used in the treatment of diseases of the peripheral nervous system, such as peripheral nerve injuries, peripheral neuropathy and localized  
15 neuropathies, and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager syndrome. Further conditions which may be treated in accordance with the present invention include mechanical and traumatic disorders, such as spinal cord disorders, head trauma and cerebrovascular diseases such as stroke. Peripheral neuropathies resulting from  
20 chemotherapy or other medical therapies may also be treatable using a protein of the invention.

Proteins of the invention may also be useful to promote better or faster closure of non-healing wounds, including without limitation pressure ulcers, ulcers associated with vascular insufficiency, surgical and traumatic wounds, and the like.

25 It is expected that a protein of the present invention may also exhibit activity for generation or regeneration of other tissues, such as organs (including, for example, pancreas, liver, intestine, kidney, skin, endothelium), muscle (smooth, skeletal or cardiac) and vascular (including vascular endothelium) tissue, or for promoting the growth of cells comprising such tissues. Part of the desired effects may be by inhibition or modulation of  
30 fibrotic scarring to allow normal tissue to regenerate. A protein of the invention may also exhibit angiogenic activity.

A protein of the present invention may also be useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, and conditions resulting from systemic cytokine damage.

A protein of the present invention may also be useful for promoting or inhibiting differentiation of tissues described above from precursor tissues or cells; or for inhibiting the growth of tissues described above.

The activity of a protein of the invention may, among other means, be measured  
5 by the following methods:

Assays for tissue generation activity include, without limitation, those described in: International Patent Publication No. WO95/16035 (bone, cartilage, tendon); International Patent Publication No. WO95/05846 (nerve, neuronal); International Patent Publication No. WO91/07491 (skin, endothelium ).

10 Assays for wound healing activity include, without limitation, those described in: Winter, Epidermal Wound Healing, pps. 71-112 (Maibach, HI and Rovee, DT, eds.), Year Book Medical Publishers, Inc., Chicago, as modified by Eaglstein and Mertz, J. Invest. Dermatol 71:382-84 (1978).

15 Activin/Inhibin Activity

A protein of the present invention may also exhibit activin- or inhibin-related activities. Inhibins are characterized by their ability to inhibit the release of follicle stimulating hormone (FSH), while activins are characterized by their ability to stimulate the release of follicle stimulating hormone (FSH). Thus, a protein of the present invention,  
20 alone or in heterodimers with a member of the inhibin  $\alpha$  family, may be useful as a contraceptive based on the ability of inhibins to decrease fertility in female mammals and decrease spermatogenesis in male mammals. Administration of sufficient amounts of other inhibins can induce infertility in these mammals. Alternatively, the protein of the invention, as a homodimer or as a heterodimer with other protein subunits of the inhibin- $\beta$  group, may  
25 be useful as a fertility inducing therapeutic, based upon the ability of activin molecules in stimulating FSH release from cells of the anterior pituitary. See, for example, United States Patent 4,798,885. A protein of the invention may also be useful for advancement of the onset of fertility in sexually immature mammals, so as to increase the lifetime reproductive performance of domestic animals such as cows, sheep and pigs.

30 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for activin/inhibin activity include, without limitation, those described in: Vale et al., Endocrinology 91:562-572, 1972; Ling et al., Nature 321:779-782, 1986; Vale



et al., Nature 321:776-779, 1986; Mason et al., Nature 318:659-663, 1985; Forage et al., Proc. Natl. Acad. Sci. USA 83:3091-3095, 1986.

#### Chemotactic/Chemokinetic Activity

5 A protein of the present invention may have chemotactic or chemokinetic activity (e.g., act as a chemokine) for mammalian cells, including, for example, monocytes, fibroblasts, neutrophils, T-cells, mast cells, eosinophils, epithelial and/or endothelial cells. Chemotactic and chemokinetic proteins can be used to mobilize or attract a desired cell population to a desired site of action. Chemotactic or chemokinetic proteins provide  
10 particular advantages in treatment of wounds and other trauma to tissues, as well as in treatment of localized infections. For example, attraction of lymphocytes, monocytes or neutrophils to tumors or sites of infection may result in improved immune responses against the tumor or infecting agent.

A protein or peptide has chemotactic activity for a particular cell population if it can  
15 stimulate, directly or indirectly, the directed orientation or movement of such cell population. Preferably, the protein or peptide has the ability to directly stimulate directed movement of cells. Whether a particular protein has chemotactic activity for a population of cells can be readily determined by employing such protein or peptide in any known assay for cell chemotaxis.

20 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for chemotactic activity (which will identify proteins that induce or prevent chemotaxis) consist of assays that measure the ability of a protein to induce the migration of cells across a membrane as well as the ability of a protein to induce the adhesion of one  
25 cell population to another cell population. Suitable assays for movement and adhesion include, without limitation, those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 6.12, Measurement of alpha and beta Chemokines 6.12.1-6.12.28; Taub et al. J. Clin. Invest. 95:1370-1376, 1995; Lind et  
30 al. APMIS 103:140-146, 1995; Muller et al. Eur. J. Immunol. 25: 1744-1748; Gruber et al. J. of Immunol. 152:5860-5867, 1994; Johnston et al. J. of Immunol. 153: 1762-1768, 1994.

#### Hemostatic and Thrombolytic Activity

A protein of the invention may also exhibit hemostatic or thrombolytic activity. As a result, such a protein is expected to be useful in treatment of various coagulation disorders (including hereditary disorders, such as hemophilias) or to enhance coagulation and other hemostatic events in treating wounds resulting from trauma, surgery or other causes. A  
5 protein of the invention may also be useful for dissolving or inhibiting formation of thromboses and for treatment and prevention of conditions resulting therefrom (such as, for example, infarction of cardiac and central nervous system vessels (e.g., stroke).

The activity of a protein of the invention may, among other means, be measured by the following methods:

10 Assay for hemostatic and thrombolytic activity include, without limitation, those described in: Linet et al., J. Clin. Pharmacol. 26:131-140, 1986; Burdick et al., Thrombosis Res. 45:413-419, 1987; Humphrey et al., Fibrinolysis 5:71-79 (1991); Schaub, Prostaglandins 35:467-474, 1988.

15 Receptor/Ligand Activity

A protein of the present invention may also demonstrate activity as receptors, receptor ligands or inhibitors or agonists of receptor/ligand interactions. Examples of such receptors and ligands include, without limitation, cytokine receptors and their ligands, receptor kinases and their ligands, receptor phosphatases and their ligands, receptors  
20 involved in cell-cell interactions and their ligands (including without limitation, cellular adhesion molecules (such as selectins, integrins and their ligands) and receptor/ligand pairs involved in antigen presentation, antigen recognition and development of cellular and humoral immune responses). Receptors and ligands are also useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction.  
25 A protein of the present invention (including, without limitation, fragments of receptors and ligands) may themselves be useful as inhibitors of receptor/ligand interactions.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for receptor-ligand activity include without limitation those  
30 described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 7.28, Measurement of Cellular Adhesion under static conditions 7.28.1-7.28.22), Takai et al., Proc. Natl. Acad. Sci. USA 84:6864-6868, 1987; Bierer et al., J. Exp. Med. 168:1145-1156, 1988; Rosenstein et al., J. Exp. Med.

169:149-160 1989; Stoltenborg et al., J. Immunol. Methods 175:59-68, 1994; Stitt et al., Cell 80:661-670, 1995.

#### Anti-Inflammatory Activity

5 Proteins of the present invention may also exhibit anti-inflammatory activity. The anti-inflammatory activity may be achieved by providing a stimulus to cells involved in the inflammatory response, by inhibiting or promoting cell-cell interactions (such as, for example, cell adhesion), by inhibiting or promoting chemotaxis of cells involved in the inflammatory process, inhibiting or promoting cell extravasation, or by stimulating or  
10 suppressing production of other factors which more directly inhibit or promote an inflammatory response. Proteins exhibiting such activities can be used to treat inflammatory conditions including chronic or acute conditions), including without limitation inflammation associated with infection (such as septic shock, sepsis or systemic inflammatory response syndrome (SIRS)), ischemia-reperfusion injury, endotoxin lethality,  
15 arthritis, complement-mediated hyperacute rejection, nephritis, cytokine or chemokine-induced lung injury, inflammatory bowel disease, Crohn's disease or resulting from over production of cytokines such as TNF or IL-1. Proteins of the invention may also be useful to treat anaphylaxis and hypersensitivity to an antigenic substance or material.

#### Tumor Inhibition Activity

20 In addition to the activities described above for immunological treatment or prevention of tumors, a protein of the invention may exhibit other anti-tumor activities. A protein may inhibit tumor growth directly or indirectly (such as, for example, via ADCC). A protein may exhibit its tumor inhibitory activity by acting on tumor tissue or tumor  
25 precursor tissue, by inhibiting formation of tissues necessary to support tumor growth (such as, for example, by inhibiting angiogenesis), by causing production of other factors, agents or cell types which inhibit tumor growth, or by suppressing, eliminating or inhibiting factors, agents or cell types which promote tumor growth.

30

#### Other Activities

A protein of the invention may also exhibit one or more of the following additional activities or effects: inhibiting the growth, infection or function of, or killing, infectious agents, including, without limitation, bacteria, viruses, fungi and other parasites; effecting

(suppressing or enhancing) bodily characteristics, including, without limitation, height, weight, hair color, eye color, skin, fat to lean ratio or other tissue pigmentation, or organ or body part size or shape (such as, for example, breast augmentation or diminution, change in bone form or shape); effecting biorhythms or circadian cycles or rhythms; effecting the

5 fertility of male or female subjects; effecting the metabolism, catabolism, anabolism, processing, utilization, storage or elimination of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors or other nutritional factors or component(s); effecting behavioral characteristics, including, without limitation, appetite, libido, stress, cognition (including cognitive disorders), depression (including depressive disorders) and violent

10 behaviors; providing analgesic effects or other pain reducing effects; promoting differentiation and growth of embryonic stem cells in lineages other than hematopoietic lineages; hormonal or endocrine activity; in the case of enzymes, correcting deficiencies of the enzyme and treating deficiency-related diseases; treatment of hyperproliferative disorders (such as, for example, psoriasis); immunoglobulin-like activity (such as, for

15 example, the ability to bind antigens or complement); and the ability to act as an antigen in a vaccine composition to raise an immune response against such protein or another material or entity which is cross-reactive with such protein.

20

### ADMINISTRATION AND DOSING

A protein of the present invention (from whatever source derived, including without limitation from recombinant and non-recombinant sources) may be used in a pharmaceutical composition when combined with a pharmaceutically acceptable carrier. Such a composition may also contain (in addition to protein and a carrier) diluents, fillers, salts, buffers, stabilizers, solubilizers, and other materials well known in the art. The term "pharmaceutically acceptable" means a non-toxic material that does not interfere with the effectiveness of the biological activity of the active ingredient(s). The characteristics of the carrier will depend on the route of administration. The pharmaceutical composition of the invention may also contain cytokines, lymphokines, or other hematopoietic factors such as M-CSF, GM-CSF, TNF, IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-13, IL-14, IL-15, IFN, TNF0, TNF1, TNF2, G-CSF, Meg-CSF, thrombopoietin, stem cell factor, and erythropoietin. The pharmaceutical composition may further contain other agents which either enhance the activity of the protein or compliment its activity or use in treatment. Such additional factors and/or agents may be included in the pharmaceutical composition to produce a synergistic effect with protein of the invention, or to minimize side effects. Conversely, protein of the present invention may be included in formulations of the particular cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent to minimize side effects of the cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent.

A protein of the present invention may be active in multimers (e.g., heterodimers or homodimers) or complexes with itself or other proteins. As a result, pharmaceutical compositions of the invention may comprise a protein of the invention in such multimeric or complexed form.

The pharmaceutical composition of the invention may be in the form of a complex of the protein(s) of present invention along with protein or peptide antigens. The protein and/or peptide antigen will deliver a stimulatory signal to both B and T lymphocytes. B lymphocytes will respond to antigen through their surface immunoglobulin receptor. T lymphocytes will respond to antigen through the T cell receptor (TCR) following presentation of the antigen by MHC proteins. MHC and structurally related proteins including those encoded by class I and class II MHC genes on host cells will serve to present the peptide antigen(s) to T lymphocytes. The antigen components could also be supplied as purified MHC-peptide complexes alone or with co-stimulatory molecules that

can directly signal T cells. Alternatively antibodies able to bind surface immunoglobulin and other molecules on B cells as well as antibodies able to bind the TCR and other molecules on T cells can be combined with the pharmaceutical composition of the invention.

5           The pharmaceutical composition of the invention may be in the form of a liposome in which protein of the present invention is combined, in addition to other pharmaceutically acceptable carriers, with amphipathic agents such as lipids which exist in aggregated form as micelles, insoluble monolayers, liquid crystals, or lamellar layers in aqueous solution. Suitable lipids for liposomal formulation include, without limitation, monoglycerides, 10 diglycerides, sulfatides, lysolecithin, phospholipids, saponin, bile acids, and the like. Preparation of such liposomal formulations is within the level of skill in the art, as disclosed, for example, in U.S. Patent No. 4,235,871; U.S. Patent No. 4,501,728; U.S. Patent No. 4,837,028; and U.S. Patent No. 4,737,323, all of which are incorporated herein by reference.

15           As used herein, the term "therapeutically effective amount" means the total amount of each active component of the pharmaceutical composition or method that is sufficient to show a meaningful patient benefit, i.e., treatment, healing, prevention or amelioration of the relevant medical condition, or an increase in rate of treatment, healing, prevention or amelioration of such conditions. When applied to an individual active ingredient, 20 administered alone, the term refers to that ingredient alone. When applied to a combination, the term refers to combined amounts of the active ingredients that result in the therapeutic effect, whether administered in combination, serially or simultaneously.

In practicing the method of treatment or use of the present invention, a therapeutically effective amount of protein of the present invention is administered to a 25 mammal having a condition to be treated. Protein of the present invention may be administered in accordance with the method of the invention either alone or in combination with other therapies such as treatments employing cytokines, lymphokines or other hematopoietic factors. When co-administered with one or more cytokines, lymphokines or other hematopoietic factors, protein of the present invention may be administered either 30 simultaneously with the cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors, or sequentially. If administered sequentially, the attending physician will decide on the appropriate sequence of administering protein of the present invention in combination with cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors.

Administration of protein of the present invention used in the pharmaceutical composition or to practice the method of the present invention can be carried out in a variety of conventional ways, such as oral ingestion, inhalation, topical application or cutaneous, subcutaneous, intraperitoneal, parenteral or intravenous injection. Intravenous administration to the patient is preferred.

When a therapeutically effective amount of protein of the present invention is administered orally, protein of the present invention will be in the form of a tablet, capsule, powder, solution or elixir. When administered in tablet form, the pharmaceutical composition of the invention may additionally contain a solid carrier such as a gelatin or an adjuvant. The tablet, capsule, and powder contain from about 5 to 95% protein of the present invention, and preferably from about 25 to 90% protein of the present invention. When administered in liquid form, a liquid carrier such as water, petroleum, oils of animal or plant origin such as peanut oil, mineral oil, soybean oil, or sesame oil, or synthetic oils may be added. The liquid form of the pharmaceutical composition may further contain physiological saline solution, dextrose or other saccharide solution, or glycols such as ethylene glycol, propylene glycol or polyethylene glycol. When administered in liquid form, the pharmaceutical composition contains from about 0.5 to 90% by weight of protein of the present invention, and preferably from about 1 to 50% protein of the present invention.

When a therapeutically effective amount of protein of the present invention is administered by intravenous, cutaneous or subcutaneous injection, protein of the present invention will be in the form of a pyrogen-free, parenterally acceptable aqueous solution. The preparation of such parenterally acceptable protein solutions, having due regard to pH, isotonicity, stability, and the like, is within the skill in the art. A preferred pharmaceutical composition for intravenous, cutaneous, or subcutaneous injection should contain, in addition to protein of the present invention, an isotonic vehicle such as Sodium Chloride Injection, Ringer's Injection, Dextrose Injection, Dextrose and Sodium Chloride Injection, Lactated Ringer's Injection, or other vehicle as known in the art. The pharmaceutical composition of the present invention may also contain stabilizers, preservatives, buffers, antioxidants, or other additives known to those of skill in the art.

The amount of protein of the present invention in the pharmaceutical composition of the present invention will depend upon the nature and severity of the condition being treated, and on the nature of prior treatments which the patient has undergone. Ultimately, the attending physician will decide the amount of protein of the present invention with

which to treat each individual patient. Initially, the attending physician will administer low doses of protein of the present invention and observe the patient's response. Larger doses of protein of the present invention may be administered until the optimal therapeutic effect is obtained for the patient, and at that point the dosage is not increased further. It is contemplated that the various pharmaceutical compositions used to practice the method of the present invention should contain about 0.01  $\mu$ g to about 100 mg (preferably about 0.1 mg to about 10 mg, more preferably about 0.1  $\mu$ g to about 1 mg) of protein of the present invention per kg body weight.

The duration of intravenous therapy using the pharmaceutical composition of the present invention will vary, depending on the severity of the disease being treated and the condition and potential idiosyncratic response of each individual patient. It is contemplated that the duration of each application of the protein of the present invention will be in the range of 12 to 24 hours of continuous intravenous administration. Ultimately the attending physician will decide on the appropriate duration of intravenous therapy using the pharmaceutical composition of the present invention.

Protein of the invention may also be used to immunize animals to obtain polyclonal and monoclonal antibodies which specifically react with the protein. Such antibodies may be obtained using either the entire protein or fragments thereof as an immunogen. The peptide immunogens additionally may contain a cysteine residue at the carboxyl terminus, and are conjugated to a hapten such as keyhole limpet hemocyanin (KLH). Methods for synthesizing such peptides are known in the art, for example, as in R.P. Merrifield, J. Amer.Chem. Soc. 85, 2149-2154 (1963); J.L. Krstenansky, *et al.*, FEBS Lett. 211, 10 (1987). Monoclonal antibodies binding to the protein of the invention may be useful diagnostic agents for the immunodetection of the protein. Neutralizing monoclonal antibodies binding to the protein may also be useful therapeutics for both conditions associated with the protein and also in the treatment of some forms of cancer where abnormal expression of the protein is involved. In the case of cancerous cells or leukemic cells, neutralizing monoclonal antibodies against the protein may be useful in detecting and preventing the metastatic spread of the cancerous cells, which may be mediated by the protein.

For compositions of the present invention which are useful for bone, cartilage, tendon or ligament regeneration, the therapeutic method includes administering the composition topically, systematically, or locally as an implant or device. When administered, the therapeutic composition for use in this invention is, of course, in a



pyrogen-free, physiologically acceptable form. Further, the composition may desirably be encapsulated or injected in a viscous form for delivery to the site of bone, cartilage or tissue damage. Topical administration may be suitable for wound healing and tissue repair. Therapeutically useful agents other than a protein of the invention which may also  
5 optionally be included in the composition as described above, may alternatively or additionally, be administered simultaneously or sequentially with the composition in the methods of the invention. Preferably for bone and/or cartilage formation, the composition would include a matrix capable of delivering the protein-containing composition to the site of bone and/or cartilage damage, providing a structure for the developing bone and  
10 cartilage and optimally capable of being resorbed into the body. Such matrices may be formed of materials presently in use for other implanted medical applications.

The choice of matrix material is based on biocompatibility, biodegradability, mechanical properties, cosmetic appearance and interface properties. The particular application of the compositions will define the appropriate formulation. Potential matrices  
15 for the compositions may be biodegradable and chemically defined calcium sulfate, tricalciumphosphate, hydroxyapatite, polylactic acid, polyglycolic acid and polyanhydrides. Other potential materials are biodegradable and biologically well-defined, such as bone or dermal collagen. Further matrices are comprised of pure proteins or extracellular matrix components. Other potential matrices are nonbiodegradable and chemically defined, such  
20 as sintered hydroxapatite, bioglass, aluminates, or other ceramics. Matrices may be comprised of combinations of any of the above mentioned types of material, such as polylactic acid and hydroxyapatite or collagen and tricalciumphosphate. The bioceramics may be altered in composition, such as in calcium-aluminate-phosphate and processing to alter pore size, particle size, particle shape, and biodegradability.

25 Presently preferred is a 50:50 (mole weight) copolymer of lactic acid and glycolic acid in the form of porous particles having diameters ranging from 150 to 800 microns. In some applications, it will be useful to utilize a sequestering agent, such as carboxymethyl cellulose or autologous blood clot, to prevent the protein compositions from disassociating from the matrix.

30 A preferred family of sequestering agents is cellulosic materials such as alkylcelluloses (including hydroxyalkylcelluloses), including methylcellulose, ethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropyl-methylcellulose, and carboxymethylcellulose, the most preferred being cationic salts of carboxymethylcellulose (CMC). Other preferred sequestering agents include hyaluronic acid, sodium alginate,

poly(ethylene glycol), polyoxyethylene oxide, carboxyvinyl polymer and poly(vinyl alcohol). The amount of sequestering agent useful herein is 0.5-20 wt%, preferably 1-10 wt% based on total formulation weight, which represents the amount necessary to prevent desorption of the protein from the polymer matrix and to provide appropriate handling of the composition, yet not so much that the progenitor cells are prevented from infiltrating the matrix, thereby providing the protein the opportunity to assist the osteogenic activity of the progenitor cells.

In further compositions, proteins of the invention may be combined with other agents beneficial to the treatment of the bone and/or cartilage defect, wound, or tissue in question. These agents include various growth factors such as epidermal growth factor (EGF), platelet derived growth factor (PDGF), transforming growth factors (TGF- $\alpha$  and TGF- $\beta$ ), and insulin-like growth factor (IGF).

The therapeutic compositions are also presently valuable for veterinary applications. Particularly domestic animals and thoroughbred horses, in addition to humans, are desired patients for such treatment with proteins of the present invention.

The dosage regimen of a protein-containing pharmaceutical composition to be used in tissue regeneration will be determined by the attending physician considering various factors which modify the action of the proteins, e.g., amount of tissue weight desired to be formed, the site of damage, the condition of the damaged tissue, the size of a wound, type of damaged tissue (e.g., bone), the patient's age, sex, and diet, the severity of any infection, time of administration and other clinical factors. The dosage may vary with the type of matrix used in the reconstitution and with inclusion of other proteins in the pharmaceutical composition. For example, the addition of other known growth factors, such as IGF I (insulin like growth factor I), to the final composition, may also effect the dosage. Progress can be monitored by periodic assessment of tissue/bone growth and/or repair, for example, X-rays, histomorphometric determinations and tetracycline labeling.

Polynucleotides of the present invention can also be used for gene therapy. Such polynucleotides can be introduced either *in vivo* or *ex vivo* into cells for expression in a mammalian subject. Polynucleotides of the invention may also be administered by other known methods for introduction of nucleic acid into a cell or organism (including, without limitation, in the form of viral vectors or naked DNA).

Cells may also be cultured *ex vivo* in the presence of proteins of the present invention in order to proliferate or to produce a desired effect on or activity in such cells. Treated cells can then be introduced *in vivo* for therapeutic purposes.

Patent and literature references cited herein are incorporated by reference as if fully set forth.

Table 3

Sel.	Species	Tissue	Cell Type
AA	Human	Kidney	19-23wks., M/F pool of 5
AB	Human	Fetal Lung	Fetal Lung
AC	Human	Placenta	26yrs., 1 specimen
AD	Murine	Embryo	Fetal ES cells
AE	Murine	Spleen	Adult spleen
AF	Murine	Fetal Brain	Fetal Brain
AG	Murine	Fetal Brain	Fetal Brain
AH	Murine	Fetal Thymus	Fetal Thymus
AI	Human	Blood	Adult PBMC/TH1or2
AJ	Human	Testes	10-61yrs., pool of 11
AK	Human	Kidney	19-23wks., M/F pool of 5
AL	Human	Neural	Adult Glioblastoma line TG-1
AM	Human	Kidney	19-23wks., M/F pool of 5
AN	Murine	Bone Marrow	Adult Stromal cell line FCM-4
AO	Murine	Thymus	Adult Subtr. Adult Thymus
AP	Human	Placenta	26yrs., 1 specimen
AQ	Human	Ovary	PA-1 Teratocarcinoma
AR	Human	Retina	16-75yrs., pool of 76
AS	Human	Brain	19-23wks., M/F pool of 5
AT	Human	Blood	Adult lymphocytes+dend. cells
AU	Human	Testes	10-61yrs., pool of 11
AV	Murine	Spleen	Adult spleen
AW	Human	Ovary	PA-1 Teratocarcinoma
AX	Human	Testes	10-61yrs., pool of 11
AY	Human	Retina	16-75yrs., pool of 76
AZ	Human	Colon	Caco-2 Adenocarcinoma
B	Human	Blood	PeripheralBloodMononuclearCell
BA	Human	Placenta	26yrs., 1 specimen
BB	Human	Blood	Adult PBMC/TH1or2
BC	Murine	Embryo	Fetal ES cells
BD	Human	Kidney	19-23wks., M/F pool of 5
BE	Human	Blood	Adult PBMC/TH1or2
BF	Human	Brain	19-23wks., M/F pool of 5
BG	Human	Brain	N/A
BH	Human	Ovary	PA-1 Teratocarcinoma
BI	Human	Kidney	19-23wks., M/F pool of 5
BJ	Human	Ovary	PA-1 Teratocarcinoma
BK	Human	Retina	16-75yrs., pool of 76
BL	Human	Testes	10-61yrs., pool of 11
BM	Human	Muscle	N/A
BN	Human	Placenta	26yrs., 1 specimen
BO	Human	Retina	16-75yrs., pool of 76
BP	Human	Kidney	19-23wks., M/F pool of 5
BQ	Human	Colon	Caco-2 Adenocarcinoma Caco2

BR	Human	Kidney	19-23wks., M/F pool of 5
BS	Human	Pituitary	Adult Pituitary
BT	Human	Blood	Adult PBMC
BU	Human	Placenta	26yrs., 1 specimen
BV	Human	Brain	N/A
BW	Human	Blood	Adult PBMC
BX	Human	Ovary	PA-1 Teratocarcinoma
BY	Human	Blood	Adult PBMC/TH1or2
BZ	Human	Kidney	19-23wks., M/F pool of 5
C	Human	Blood	PeripheralBloodMononuclearCell
CA	Murine	Embryo	Fetal ES cell embryoid bodies
CB	Human	Brain	19-23wks., M/F pool of 5
CC	Human	Brain	N/A
CD	Human	Brain	19-23wks., M/F pool of 5
CE	Human	Blood	Adult lymphocytes+dend. cells
CF	Human	Placenta	26yrs., 1 specimen
CG	Human	Testes	10-61yrs., pool of 11
CH	Human	Kidney	19-23wks., M/F pool of 5
CI	Human	Brain	N/A
CJ	Human	Brain	19-23wks., M/F pool of 5
CK	Human	Testes	10-61yrs., pool of 11
CL	Human	Retina	16-75yrs., pool of 76
CM	Human	Adult Lung	Adult Lung
CN	Human	Brain	19-23wks., M/F pool of 5
CO	Human	Brain	N/A
CP	Human	SalivaryGland	N/A
CQ	Human	Heart	13-73yrs., pool of 3
CR	Human	Testes	10-61yrs., pool of 11
CS	Human	Brain	19-23wks., M/F pool of 5
CT	Human	Brain	N/A
CU	Human	Pineal Gland	N/A
CV	Human	Mammary	Adult Human Mammary
CW	Human	Brain	19-23wks., M/F pool of 5
CY	Human	Pineal Gland	N/A
CZ	Human	Testes	10-61yrs., pool of 11
D	Human	Blood	PeripheralBloodMononuclearCell
DA	Human	Placenta	26yrs., 1 specimen
DB	Human	Prostate	Adult Prostate
DC	Human	Pineal Gland	Adult Pineal Gland
DD	Human	Testes	10-61yrs., pool of 11
DE	Human	Testes	Adult NCCIT TeratoCA
DF	Human	Brain	N/A
DG	Human	Placenta	26yrs., 1 specimen
DH	Human	Brain	19-23wks., M/F pool of 5
DI	Human	Testes	10-61yrs., pool of 11
DJ	Human	Placenta	26yrs., 1 specimen
DK	Human	Fetal Kidney2	Fetal Kidney

DL	Human	Brain	N/A
DM	Human	Brain	N/A
DN	Human	Brain	19-23wks., M/F pool of 5
DO	Human	Testes	10-61yrs., pool of 11
DP	Murine	Embryo	Fetal ES cell embryoid bodies
DQ	Human	Placenta	26yrs., 1 specimen
DR	Human	SalivaryGland	N/A
DT	Human	Brain	N/A
DU	Human	Brain	19-23wks., M/F pool of 5
DV	Human	Pineal Gland	Adult Pineal Gland
DW	Human	Brain	N/A
DX	Human	Testes	10-61yrs., pool of 11
DY	Human	Brain	N/A
DZ	Human	Testes	Adult NCCIT TeratoCA
E	Human	Blood	PeripheralBloodMononuclearCell
EA	Human	Brain	19-23wks., M/F pool of 5
EB	Human	Melanoma	Adult Melanoma
EC	Human	Brain	N/A
ED	Human	Placenta	26yrs., 1 specimen
EE	Human	Testes	10-61yrs., pool of 11
EF	Human	Liver	Adult Liver
EG	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
EH	Human	Blood	PeripheralBloodMononuclearCell
EI	Human	Brain	19-23wks., M/F pool of 5
EJ	Human	Placenta	26yrs., 1 specimen
EK	Human	Brain	19-23wks., M/F pool of 5
EL	Human	Testes	10-61yrs., pool of 11
EM	Human	Fetal Kidney2	Fetal Kidney
EN	Human	Brain	19-23wks., M/F pool of 5
EO	Human	Adrenal Gland	Adult Adrenal Gland
EP	Human	Placenta	26yrs., 1 specimen
EQ	Human	Testes	10-61yrs., pool of 11
ER	Human	Brain	19-23wks., M/F pool of 5
ES	Human	Placenta	26yrs., 1 specimen
ET	Human	Testes	10-61yrs., pool of 11
EU	Human	Kidney	Adult Kidney
EV	Human	Stomach	Adult Stomach
EW	Human	Placenta	26yrs., 1 specimen
EX	Human	Testes	10-61yrs., pool of 11
EY	Human	Brain	19-23wks., M/F pool of 5
EZ	Human	Fetal Kidney2	Fetal Kidney
FA	Human	Brain	19-23wks., M/F pool of 5
FB	Human	Placenta	26yrs., 1 specimen
FC	Human	Testes	10-61yrs., pool of 11
FD	Human	SalivaryGland	N/A
FE	Human	Brain	N/A
FF	Human	Testes	Adult NCCIT TeratoCA

FG	Human	Brain	N/A
FH	Human	Brain	19-23wks., M/F pool of 5
FI	Human	Small Intest	Adult Small Intestine
FJ	Human	Lung CA	Adult Lung CA
FK	Human	Kidney	Adult Kidney
FM	Human	Brain	N/A
FN	Human	Brain	19-23wks., M/F pool of 5
FO	Human	Brain	N/A
FP	Human	Placenta	26yrs., 1 specimen
FQ	Human	Testes	10-61yrs., pool of 11
FR	Human	Placenta	26yrs., 1 specimen
FS	Human	Testes	10-61yrs., pool of 11
FT	Chicken	Fetal Lung	Fetal Lung
FU	Chicken	Limb Bud	Fetal St. 23 Limb Bud
FV	Human	Testes	Adult NCCIT TeratoCA
FW	Human	Testes	Adult NCCIT TeratoCA
FX	Human	Brain	19-23wks., M/F pool of 5
FY	Human	Placenta	26yrs., 1 specimen
FZ	Human	Placenta	26yrs., 1 specimen
G	Human	Blood	PeripheralBloodMononuclearCell
GA	Human	Testes	10-61yrs., pool of 11
GB	Human	Placenta	26yrs., 1 specimen
GC	Human	Testes	10-61yrs., pool of 11
GD	Human	Placenta	26yrs., 1 specimen
GE	Human	Brain	N/A
GF	Human	Brain	19-23wks., M/F pool of 5
GG	Human	Fetal Kidney2	Fetal Kidney
GH	Human	Placenta	26yrs., 1 specimen
GI	Human	Retinoblastoma	Adult Retinoblastoma Y79
GJ	Murine	Spleen	Adult Spleen
GK	Human	Fetal Kidney2	Fetal Kidney
GL	Murine	Lymph Node	Adult Lymph Node
GM	Human	Uterus	N/A
GN	Human	Blood	PeripheralBloodMononuclearCell
GO	Human	Adrenal Gland	Adult Adrenal Gland
GP	Human	Ovary	PA-1 Teratocarcinoma
GQ	Human	Pineal Gland	N/A
GR	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
GS	Human	Retina	16-75yrs., pool of 76
GT	Human	Brain	N/A
GU	Human	Fetal Kidney2	Fetal Kidney
GV	Rat	Retina	Newborn Retina
GW	Chicken	Limb Bud	Fetal St.26 Limb Bud
GX	Human	Brain	N/A
GY	Human	Testes	10-61yrs., pool of 11
GZ	Human	Brain	19-23wks., M/F pool of 5
H	Human	Blood	PeripheralBloodMononuclearCell

HA	Human	Testes	Adult NCCIT TeratoCA
HB	Human	Fetal Kidney2	Fetal Kidney
HC	Human	Brain	19-23wks., M/F pool of 5
HD	Human	Brain	N/A
HE	Human	Testes	10-61yrs., pool of 11
HF	Human	Brain	19-23wks., M/F pool of 5
HG	Human	Fetal Kidney2	Fetal Kidney
HH	Human	Brain	N/A
HI	Human	Testes	10-61yrs., pool of 11
HJ	Human	Brain	N/A
HK	Human	Brain	19-23wks., M/F pool of 5
HL	Human	Fetal Kidney2	Fetal Kidney
HM	Human	Testes	Adult NCCIT TeratoCA
HN	Human	Fetal Kidney2	Fetal Kidney
HO	Human	Brain	N/A
HP	Human	Brain	19-23wks., M/F pool of 5
HQ	Human	Testes	10-61yrs., pool of 11
HR	Human	Brain	N/A
HS	Human	Brain	N/A
HT	Human	Brain	19-23wks., M/F pool of 5
HU	Human	Fetal Kidney2	Fetal Kidney
HV	Human	Testes	10-61yrs., pool of 11
HW	Human	Brain	N/A
HX	Human	Brain Hippoca	Adult Brain Hippocampus
HY	Human	Trachea	Adult Trachea
HZ	Human	Brain Thalamus	Adult Brain Thalamus
I	Human	Blood	PeripheralBloodMononuclearCell
IA	Human	Thyroid	Adult Thyroid
IB	Human	Embryonal CA	Fetal NT2-D1
IC	Human	WER1-Rb1 line	Adult Retinoblastoma
ID	Human	Muscle	N/A
IE	Human	Brain	19-23wks., M/F pool of 5
IF	Human	Uterus	N/A
IG	Human	Testes	10-61yrs., pool of 11
IH	Human	Muscle	N/A
II	Human	Brain	N/A
IJ	Human	Blood	PeripheralBloodMononuclearCell
IK	Human	Retinoblastoma	Adult Retinoblastoma Y79
IL	Human	Retina	16-75yrs., pool of 76
IM	Human	Various	Various
IN	Human	Prostate	Adult Prostate
IO	Human	Brain	19-23wks., M/F pool of 5
IP	Human	Fetal Kidney2	Fetal Kidney
IQ	Human	Prostate	Adult Prostate
IR	Human	Brain Hippoca	Adult Brain Hippocampus
IS	Human	Trachea	Adult Trachea
IT	Human	Brain Thalamu	Adult Brain Thalamus



## SEQUENCE LISTING

## (1) GENERAL INFORMATION:

- (i) APPLICANT: Jacobs, Kenneth  
McCoy, John  
LaVallie, Edward  
Racie, Lisa  
Merberg, David  
Treacy, Maurice  
Spaulding, Vikki  
Agostino, Michael
- (ii) TITLE OF INVENTION: SECRETED, EXPRESSED SEQUENCE TAGS
- (iii) NUMBER OF SEQUENCES: 1500
- (iv) CORRESPONDENCE ADDRESS
  - (A) ADDRESSE: Genetics Institute, Inc.
  - (B) STREET: 87 CambridgePark Drive
  - (C) CITY: Cambridge
  - (D) STATE: Massachusetts
  - (E) COUNTRY: U.S.A
  - (F) ZIP: 02140
- (v) COMPUTER READABLE FORM:
  - (A) MEDIUM TYPE: Floppy Disk
  - (B) COMPUTER: IBM PC Compatible
  - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
  - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
  - (A) APPLICATION NUMBER:
  - (B) FILING DATE:
  - (C) CLASSIFICATION:
- (vii) ATTORNEY/AGENT INFORMATION:
  - (A) NAME: Brown, Scott A.
  - (B) REGISTRATION NUMBER: 32,724
- (ix) TELECOMMUNICATION INFORMATION:
  - (A) TELEPHONE: (617) 498-8224
  - (B) TELEFAX: (617) 876-5851

## (2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 320 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

GAATTCGGCC	TTCATGGCCT	AAGTGTTTAA	ATTATAAGCT	GGTGAAGTGA	AATAACACAA	60
ATCAAGCTCA	CCAATTTTAA	TACTCAGCTG	TTGATAAACA	AACTGAAGA	GTGACATTTA	120
AATTTGAATT	ATCTTCTTTG	AAGTAGCATT	GCAGCACTTT	TGAATGACTT	CCAAAAGGCT	180
GATCATAAAA	ATCACTTCAA	TCATTTTCAA	ATTTTACTTT	AGCAGCAATG	AAGTTATTTG	240

GTATGACTCA GATGAACCTT CTGCTCTGTC TTGGAGTTAT TATGGTCATT TCATTTTCTG 300  
CAACCTGGGA AAACCTCGAG 320

## (2) INFORMATION FOR SEQ ID NO:2:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

GAATTCGGCC TTCATGGCCT ACGAGTGGAT CTGGTTGAGA GGAAAGCAGC TAAAAATACA 60  
GGAGATGAAA GGGATCATAA CGAACATAAT GAACCATGTT CATTATGGTT CGTGGGGAGG 120  
CAGGAAAGCA CAGTATCCAG GGCATAGGCA GAAGAGCTGT CTTTCACGGG AGGAGGGGAA 180  
CATATTCTAC TGCAATAAGC AAGGGCGGG TAAGTACGGA TCGGGTACTT TGGGAACATAT 240  
GACGGTAGGG AGTTCAGGAA GTTGCTGCCT GAAGGCATAA AGGTTTTTTT TTTTTTTTTT 300  
TTTTTTTGCC AATTGGTCCA GTACCCTCCT TCTGTGGCCC CCATCTCCAG TCTCGAG 357

## (2) INFORMATION FOR SEQ ID NO:3:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

GAATTCTTTA TATAATTTGG ATACCTACTC ATTGTCAGTT GTATGCTTTG CAAATATCTT 60  
TCCTGACCCT TACTTACCTT TTAACCTCTT ATGGTATCTT TGATGAATCA AAAATTTTTC 120  
TTTTTTTGTT GTTTTTTGAG ACAGAGTCTT AACTCTGTCA CCCAGGCTGG AGTGCAGTGC 180  
ATGAACATGG CTCACTGCAG CCTCAACTTC TTGGACTCAA GCAATCCTCC TGCCTCAGAA 240  
CCTCTCGAG 249

## (2) INFORMATION FOR SEQ ID NO:4:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

GAATTCGGCC TTCATGGCCT AGACCTGCCT CTAGCTCCTT TCCTTCTACT CTCCTGCTCA 60  
GACCATTAGT AGGTACTTTG TTAATAAAAA AACTAGATTA ACATCAATAT TACTCCAATT 120  
TGGTATCTTT TACACTATGT ATTATACCTA CTTTCTTTT ATTTCATTTA CAAATAGTTT 180  
AAATTACTTT ATCAACCAGC TGTATGTTT CCCTCTTGTA AAAGTACCAT CAAGTGGGGA 240  
AAATGTATGT GGCAGTCTCG AG 262

## (2) INFORMATION FOR SEQ ID NO:5:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

```

GAATTCGGCC TTCATGGCCT AATAACTTAC CCAGTCACGA ATATTTCTTC ATAGCAGCAT      60
CAGAGTGGAC TAATACGATT ATAATTATCA TCACCTTTTG ACTGACCAAT TGATTACAG      120
TATTGAGTTC AATCTGTTT TTTAAAAAAT ATCTTCTAAA TATCAGGTGC TGTATTAGAT      180
GTGGGGTACA AAAATGTATT TTCATTTACT CACTAATTTA CTTAAATTT ATTTATTGAG      240
GTACCTCGAG                                         250

```

## (2) INFORMATION FOR SEQ ID NO:6:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

```

GAATTCGGCC TTCATGGCCT AGGTGCTGGA AGTAAGCTGT GTGAACAAAT GAGACGATTC      60
CCCTTTCTAA TGAGTTTATA TGCAATGTGG TATCTTTACC GATACATGCT CTGTCAGAAA      120
GAAGCAGCCC ACTTCTGTCC AATAGCCAAT CCGGCTTCAG GAGCAGCAGG AGAGGCTTCG      180
GGAACGGGAG AAGAGGCTTC AGCAGCTGGC CGAGCCACAG AGCGACTTGG AGGAGCTGCA      240
CGAGAACAAG AGCGCACTGC AGTTGGAGAG CTCGAG                                         276

```

## (2) INFORMATION FOR SEQ ID NO:7:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

```

GAATTCGGCC TTCATGGCCT ACTCATTCCA AAATAAAAAA AAAAATTTCC CATGATCTTA      60
TCTAGCTTCT CTAGCAGTAC TTGTATGATT TCACCTTTCT TTCTTTATTC TTTTCTTCCA      120
TATTTTTTTT TTTTGAGACA GGGTCTCACT CTATTGTCCA GGCTAGAGTG CAGTAGTTTG      180
ATCATGACTC ACTCTAACCT GGACCTCCGG GGCCTAAGTA ATCTTCCAC CTCAGCCTCT      240
CAAGTAGCTG GGACTACAGG GATGTACCAC CATGCCTGGC TAAG                                         284

```

## (2) INFORMATION FOR SEQ ID NO:8:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

```
GTTGAATTCT AGACCTGCCT CGAGGACGCC AGGGAAGTGA GTTGAAAATC TGAAAATGCG      60
GCCATGGACT GGTTCCTGGC GTTGGATTAT GCTCATTCTT TTTGCCTGGG GGACCTTGCT      120
GTTTTATATA GGTGGTCACT TGGTACGAGA TAATGACCAT CCTGATCACT CTAGCCGAGA      180
ACTGTCCAAG ATTCTGGCAA AGCTTGAACG CTTAAAACAG CAGAATGAAG ACTTGAGGCG      240
AATGGCCGAA TCTCTCCGGA TACCAGAAGG CCCTATTGAT CAGGGGCCAG CTATAGGAAG      300
AGTGC GCGTT TTAGAAGAGC AGCTTGTTAA GGCCAAAGAA CAGATTGAAA ATTACAAGAA      360
ACAGACCAGA AATGGTCTGG GGAAGGATCT CGAG                                     394
```

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

```
GCTGTGATGA AAATGCTTTA TGCTTCAACA CTGTTGGAGG ACACAACTGT GTTTGCAAGC      60
CGGGCTATAC AGGGAATGGA ACGACATGCA AAGCATTTTG CAAAGATGGC TGTAGGAATG      120
GAGGAGCCTG TATTGCCGCT AATGTGTGTG CCTGCCACCA AGGCTTCACT GGACCCAGCT      180
GTGAAACGGA CATTGATGAA TGCTCTGATG GTTTTGTTCA ATGTGACAGT CGTGCTAATT      240
GCATTAACTT GCCTGGATGG TACCACTGTG AGTGCAGAGA TGGCTACCAT GACAATGGGA      300
TGTTTTTACC AAGTGGAGAA TCGTGTGAAG ATATTGATGA GTGTGGGACC ACTCGAG       357
```

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

```
GAATTCGGCC TTCATGGCCT ATTTCCGATC TATGTATCTG TACTCATACA GCCTCATCGG      60
GCTAAACAGC CTTCTTTTCA GAACAGTAGA TCACTCAACT GGGTTTTCOA GTGACTGTTT      120
ACCTTTCAAG GCTGGCTTTA TAGGTCTTGC CTCACTGTAT CCAGCAATCC AAACCTTTACC      180
CTATCCAGT CAGGACTGCA CACCTCATAT TGAAAGACAT ACCTTAGAAC CAGACTCCCC      240
AAACCTTACA AATATCCCAC CCTTGACTCC CGTTCTCGAG                                     280
```

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

```

GAATTCTAGA CCTGCCTCGA GCGCCACACA GTGACTGCCG GGTAAAGTTG TGAATTACG      60
TCCCTGGACT CACCCCTGCG CTTCCTCGCC GAGTCCTGGC CATAAAGGGC CGCGCCACCA      120
CCCTGCCCTG ACCCTCCCCA ACTCTCCCTG TCTCCTCTTT CATTCTTCCC CTCTTCCCTT      180
TTCCCTCTCT TTCCCCACTT CGATATGAGC TGCTTCTTAA CGGTATGAGA TTATTNACT      240
CCTTCTTCTT CCTTTCCTTT CCTGTCCTGC CTGGCCTAGA GAGGTGCCCT GCCTGTCCCT      300
CCTGCACCCA CCGTCCTTTT CCAAGCATGA ACAGTGGGAC AGGCCCCAGG AGATGGGTGC      360
CAGGGAGCAG AAGGGGGAGC CTTCAGGCCT GGACAAAACG AAACACCCCC CCAAAAAAAG      420
NAAACCCACG ACTCGAG                                         437

```

## (2) INFORMATION FOR SEQ ID NO:12:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

```

GTTTCTTCTA AGTAGATCTT CCTTCCCCAT TAACTAGGT TTTCTACTGC AAGATATTTT      60
GTGCATTGCT GTTTTAAACC CTTTAAACAG CGAATCATAG CAGTCTAAGA AGTCTTCTGA      120
ACCATCCTGG ACTCTTGGTG TGATTTTAAA TTGTGTCTAC AAGTTCTCTG ACATTCTTCC      180
CACCAAGAGG TAGAGTCTGT TTCCCCTCCC TTTGAACCTA GGTAGGCCTT TGTTACTGCC      240
TTGATGAATA CAATGAGACT CGAG                                         264

```

## (2) INFORMATION FOR SEQ ID NO:13:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

```

GATTTTITAC CCAAAGCTCT GGAATTGTAC ATTTATTTT TAAACTCAA AGAGGGAAG      60
AGCCTTGAT CATATGTGAA CATTGTATCA TAGGTAATGT TGTACAGACC CTTTATACA      120
GTGATCTGTC TTGTTCTGTC AGCAAAAATC CTCTATGGAC ATAGGAGGTG CTGTGTCCCA      180
TGCCCTCTTG CCTGACAGT GTCCCATGGG CCCCCTTCTG CTCCCTGCCC CCTCCCTGCT      240
ACTGCTGATG CACTCCCCC CCTCGAG                                         267

```

## (2) INFORMATION FOR SEQ ID NO:14:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

```

GAATTCGGCC TTCATGGCCT ATTTTATT TGTGTTGTTT TGTGTTGTGG GGATGGGGTT      60
TTGCCGTGTT GCCCAGGCTG GTTTCGAATT TTTGGGCTTA TGCAATCCAC CCACCTTGGC      120
CTCCCAAAGT GCAGGGATTA CAGGCATGAG CCATCTTGCT GGGCCACCTT TTTCTTCTCT      180
TTTAACAAAT TCAGCAATTT TTCAGTCCCA GAAATCTGTA AATACATTTT TTGTGGAAAA      240
ATACAATGGG AATGGCATCA AAAGATGGTT TCTATTAGGA ATGGGAACAG GTAACAGTTT      300
TCCCTGCCAC CTCAACAATC TCGAG                                           325

```

## (2) INFORMATION FOR SEQ ID NO:15:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

```

GGGCTGGCAG GCGGGCCAAA GGTAATGAAG CAAAGAGAGA GGGAAAAGAC GTGTGAAAAT      60
TGCAGAGGGG GTGACCGAGG GAAACACGTG AGCGTGATAA TGACAGAAAA ACCACGGAAG      120
GAGCAAACCT GGGCAGGGGG TGGGAAACCC GGGCCGTTTC CAGGGAGCAC AGGCAGACTC      180
AGAGGTAACA CTCAAAAGCA ACAACAGAAG CAAGGAGGAA GTGGGAAAAA ATTTTAAATG      240
TGCTACAACG AAACAGCTGC CTGAATTCTA TATACCCTCT GAAAATAATC TGCACATAAA      300
ATGGGAAAGC TTCACGCAG CAGACCCAC TCGAG                                           335

```

## (2) INFORMATION FOR SEQ ID NO:16:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

```

GAATTCGGCC TTCATGGCCT ATGCTTCTTC CACGCACCAC CACCACCACC ACCACCATCA      60
TGGCCATAGC CACGGTGGCC TGGGGGTGCT GCCTGATGGG CAGTCCAAGC TCCAGGCCCT      120
GCATGCCCAG TATTGCCAAG GACCGGGCCC TGCCCCGCCA CCCTACCTCC CACCCAGCA      180
GCCCTCTCTT CCCCCACCTC CCCAGCAGCC CCCACCCTTG CCCCACCTGG GCTCCATTCC      240
ACCGCCTCCC GCCTCAGCCC CACCTGTGGG GCCACATCGC CACTTCCACG CCCATGGCCC      300
AGTCCCAGGG CCCCAACACT ATACCTTGGG CCGGCCAGGC AGGGCACCCA GACGGGGGGC      360
TGGAGGACAC CCTCAGTTTG CTCCACATGG CCGCCACCCC CTGCACCAGC CCACATCCCC      420
ACTGCCCTG TACAGTCCTG CCCCCAGCA CCCTCCAGCC CACAAACAGG GCCCTAAGCA      480
CTTCATCTTC AGCCACCACC CATCTCGAG                                           509

```

## (2) INFORMATION FOR SEQ ID NO:17:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

GAATTCGGCC	TTCATGGCCT	AAAGATGGCG	GAGAACAGCG	GTCGCGCCGG	CAAGAGCAGC	60
GGGAGCGGCG	CGGGGAAGGG	GGCGGTGTCC	GCAGAGCAGG	TGATTGCTGG	CTTCAACCGC	120
CTTCGGCAGG	AACAGCGAGG	CCTGGCATCC	AAAGCAGCTG	AGTTGGAGAT	GGAGTTGAAT	180
GAGCACAGCC	TAGTGATCGA	TACACTGAAG	GAGGTAGATG	AAACTCGTAA	GTGCTACCGC	240
ATGGTTGGAG	GAGTGCTGGT	GGAGCGAACT	GTCAAAGAGG	TGCTGCCCCG	TTTGGAGAAC	300
AACAAGGAGC	AGATACAGAA	GATCATTGAG	ACACTGACAC	AAGCAACTCG	AG	352

## (2) INFORMATION FOR SEQ ID NO:18:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 207 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

GAATTCGGCC	AAAGAGGCCT	AGCTAGGTTT	TGAAGCTTCT	GAGTTCTGCA	GCCTCACCTC	60
TGAGAAAACC	TCTTTGCCAC	CAATACCATG	AAGCTCTGCG	TGACTGTCCT	GTCTCTCCTC	120
GTGCTAGTAG	CTGCCTTCTG	CTCTCTAGCA	CTCTCAGCAC	CAATGGGCTC	AGTCCCCCCC	180
CCCGTACACG	CCTCGAGGCA	GGTCGAG				207

## (2) INFORMATION FOR SEQ ID NO:19:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

GAATTCGGCC	TTCATGGCCT	AGGCGGGACT	AACACAGGGT	TGTCATCTTT	TCCTTTTGCC	60
AAGAAAGAAC	ATTAAATGT	ACTACCAGCA	TCTGCCATCA	CTAGCATTTT	ATAAAAAGAG	120
GTTCTGTTAG	CAACAGAGTA	GAACTGTAG	GAAAGCATCT	CAGAACAAAA	CTAAGTTGAA	180
TAAATTCACC	TAATAAAAAT	GCCTTGGTCT	AGGATTTCCTT	TTCTTCATCA	AAAGCTGCAA	240
GAGAAAGCCA	CTGCTTACCT	GATGCCGATT	TACTGGTCAT	TGGGGTGGGC	AGGTTTGGTT	300
CTCGAG						306

## (2) INFORMATION FOR SEQ ID NO:20:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

GGTCTCACTT	GTCTCATCCT	GTCGCCCAGG	CTGGAATGCA	GTGGTATGAT	CTCAGCTCAC	60
TGCAACCTCA	GCCTCCTGGG	TTCAAGTGAT	TATCCTGCCT	CAGCCTCCAA	GTANCTGGGA	120
CTATAAGCAC	ACATCACCAC	ACCCAGCCAA	TTTTTTTGAA	TTTTTAATAG	GGTTTCACTA	180
TGTTGGCCAG	GCTGGTTGAA	CTCCTATCCT	CAAGCGATCC	ACCCACCTCG	GCCTCCCGAA	240

GTGCTGGGAT TACCTGAGCC ACCGTGCCCC GCCCATTTCA CAGTACTTTT TATTTAACCC 300  
 TATCGTGCTA GGGCACCATG CAATATACAG CTATTTTCATT TTCCTTTTGT CTCTGTTTCT 360  
 TAGGTGGTCT CGAG 374

## (2) INFORMATION FOR SEQ ID NO:21:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

GCAATGGCAG GAATTCGAAA TATTGGCATA TGGTTCTTTT GGATTAGATT ATATAAAATC 60  
 AGAAGAGGTA GAACCAGGCC CCAAGCACTC CTTTTTCTCT GCATGATACT TCTGCTTATT 120  
 GTCCTTCACA CTAGCTACAT GATTTATAGT CTTGCTCCCC AATATGTTAT GTATGGAAGC 180  
 CAAAATTACT TAATAGAGAC TAATATAACT TCTGATAATC ATAAAGGCAA TTCAACCCTT 240  
 TCTGTGCCAA AGAGATGTGA TGCAGAAGCT CCTGAAGATC AGTGTACTGT TACCCGGACG 300  
 CTCGAG 306

## (2) INFORMATION FOR SEQ ID NO:22:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

GGTAGAGATA ACAAACAGG ATACCAAAGT TGAGCTGGAG ACTTACAAGC AAACCTCGGCA 60  
 AGGTCTGGAT GAAATGTACA GTGATGTGTG GAAGCAGCTA AAAGAGGAGA AGAAAGTCCG 120  
 GTTGGAAGTG GAAAAAGAAC TGGAGTTACA AATTGGAATG AAAACCGAAA TGGAAATTGC 180  
 AATGAAGTTA CTGGAAAAGG ACACCCACGA GAAGCAGGAC ACACTAGTTG CCCTCCGCCA 240  
 GCAGCTGGAA GAAGTCAAAG CGATTAATTT ACAGATGTTT CACAAAGCTC AGAATGCAGA 300  
 GAGCAGTTTG CAGCAGAAGA ATGAAGCCAT CACGCTCGAG 340

## (2) INFORMATION FOR SEQ ID NO:23:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 176 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

GAATTCGGCC AAAGAGGCCT AGATTTTAAA TTTGTTTGAT ACCTGCTGTG TATTCCTTGC 60  
 ATACCCAGCA CATTGTTGCC CATATTGTTG ACATGTAGTA TGTATTTATT ACAATTATAT 120  
 GATTAATGAA ATGTATCTTA TTTTTCAT GTATAGCATG TACAGTCACA CTCGAG 176

## (2) INFORMATION FOR SEQ ID NO:24:



## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

```

GAATTCGGCC AAAGAGGCCT ATTCTTTGTC TTTTGCACAT GTTCTTTGAG TCTTAGTATC      60
TGTAACGTGG CGTACTCTC TCTATCATGG GGGGGCATGT TTTGACATTA AATTGACTTT      120
TAAGAAAAAC ATGTCACTAA CCTGAAGCTC AGCCACACAG TGACTTTTAA GGTTTTATTT      180
AGACTTTACT GTTGTCTCA TGAGAGTAGG TACAGACTGC ATAAGGTTTA GAATCCCAGC      240
ATATGTCTGA AACGACGGGA CTTTCACTGT GATTTCACC AGAGAAATTA TAGCAGAGTG      300
GCTGAGCATG TGCTCTGAG CCAGGCCCCA GCTCTGCTGC TGACGAGCTG TGTGGTCCGTG      360
GGCAGAGTGG TCTCCGAGT CCAGTCCCTC CTCTGTAAAA TGGGCTTACT CGAG          414

```

## (2) INFORMATION FOR SEQ ID NO:25:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

```

GAATTCGGCC AAAGAGGCCT AAACATATAC CTAGTCTATA CTCTCTCTTA TCTCTGAACA      60
CTTTTCATCT GGAGCTATTA ATGCCCTCTA GCCTTTATTA TAATTATCAC ATATAATTAT      120
GCCTTTTCTC CTCAAAATTA TCTGTTGGAG TCATCTTATA GTAGAGTCTT TACAGAACAC      180
AAAGCATCA ATCACTTTAT TTCAGACACC AACCTGTTT TTGATGAACA TATGTTAGTC      240
TTAAGCCATC TAAAGTAATG CTAATGTGGG ATCTTATGGA AGACTACTGG TAATACAGGA      300
AAAAAAGTGG CAAAGAAATC TGACACGTTT GGCAATTATT CCTGAGGCTC TGACCTCTCA      360
ATTGTTGAGT GTTGGAGGTC ACAGTAAACA AACCATATAA AGATCATGTT GAAAGTCAAC      420
ATTATTAATA TACCATACTT GAAGGATATG TGGTTATTGT CTCACGTGTC CATGTGAAGA      480
GACCACCGTC CCTCGAG          497

```

## (2) INFORMATION FOR SEQ ID NO:26:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

```

GAATTCGGCC AAAGAGGCCT AGTTTTTGAT GAATTTGTGT TATTTACTTA TAACTAGAGT      60
TTGAATGTTT ATTGGGAAAA CTTAATCATG ATCATCTACT GGTGGCTCGA G          111

```

## (2) INFORMATION FOR SEQ ID NO:27:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs

(B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

GAATTCGGCC	AAAGAGGCCT	ATGCAATTCT	GACCAGGAAG	CTCCTCTTTA	ATTGGAAATT	60
CTTAGAAAGG	TATGGAGCAA	AGGAGATCCC	AGCAAACATT	CCGGCATCTA	CTGCTCTTGG	120
GTTTTTCTG	TGTTGGTTTT	TTTGTTTTG	TTTTGTTTAT	GAGATGGAGT	CTCACTCTGT	180
CGCCAGGCT	GGAGTGCAGT	GGCGCAATCT	CAGCTCACTG	CAATCTCCAC	CTCCAGAGTT	240
CAAGTGAATA	TCCTGCCTCA	GCCTCTCAA	CAGCTGGAAT	TACAGGTATA	CACCACCACA	300
CCGAGCTCGA	G					311

(2) INFORMATION FOR SEQ ID NO:28:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 597 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

GAATTCGGCC	AAAGAGGCCT	AAGTGCAGTG	GTGCGATTAT	AGC1CACTGT	AGCCTCAGAA	60
TCCTGGGCTC	AAGCTGTCCT	CCCACTTAGC	CTCCCAAAGT	GCTGGGACTA	CAGGCGTGTG	120
CCACGGGGCC	CAGCCATTTT	TTCGAATATT	TTCAATCTGC	AGTTGTTTGA	ATCCACAGAT	180
GCAGAACCCA	TTTCTAATGG	AGGGCTGACT	ATACCTTTCT	GATGACCTAA	ATATTTGTGT	240
CCACTATTGG	GACACTCCTT	TCTTAGTGTC	AAGGTTTGTG	AGAAATTGAG	GGCTGTTTGA	300
TGGGCAAAGA	TTTATTTATT	TATTTACTGG	CTTATCTACA	ATTGAGACAG	GGTCTCACTA	360
TGTTTCTCAG	GCTAGTTCTA	ACTCCTGGGC	TGAAGCAGTC	CTCCCATCTC	AGCCTCCCAG	420
AGTGCTGGGA	TTACAGGTGT	GACACACCAT	ACCCGGCAGA	GCAAAGAGTT	AAGAGTACAA	480
GACATTTGAT	CATCTTGAGG	AGTATTTACT	TCAGACTGAA	ACACCACATG	AAATTCTAGA	540
GTCCAACAGA	AAGTGAATA	ATTTTGTGCT	TTCCCTTCT	TCCGCTACAT	CCTCGAG	597

(2) INFORMATION FOR SEQ ID NO:29:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 506 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

GAATTCGGCC	AAAGAGGCCT	AATTCTAGAC	ATGCTCAGCT	TTGTGGATAC	GCGGACTTTG	60
TTGCTGCTTG	CAGTAACCTT	ATGCCTAGCA	ACATGCCAAT	CTTTACAAGA	GGAAACTGTA	120
AGAAAGGGCC	CAGCCGGAGA	TAGAGGACCA	CGTGGAGAAA	GGGGTCCACC	AGGCCCCCA	180
GGCAGAGATG	GTGAAGATGG	TCCCACAGGC	CCTCTGGTC	CACCTGGTCC	TCCTGGCCCC	240
CTGGTCTCGG	TGGGAACCTT	GCTGCTCAGT	ATGATGGAAA	AGGAGTTGGA	CTTGGCCCTG	300
GACCAATGGG	CTTAATGGGA	CCTAGAGGCC	CACCTGGTGC	AGCTGGAGCC	CCAGGCCCTC	360
AAGGTTTCCA	AGGACCTGCT	GGTGAGCCTG	GTGAACCTGG	TCAAACCTGG	CCTGCAGGTG	420
GTCGTGGTCC	AGCTGGCCCT	CCTGGCAAGG	CTGGTGAAGA	TGCTCACCCT	GGAAAACCCG	480
GACGACCTGG	TGAGAGAGGC	CTCGAG				506

## (2) INFORMATION FOR SEQ ID NO:30:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

```

GAATTCGGCC AAAGAGGCCT AGTCTGTGGT CATTTTCAAC TCTCATTTAT AGGATTCTAA      60
AAGGGCACTA CATTACTCCA CTCCTTATC TAAAATAAAT TAAAATTCA TCGGAATTTG      120
TCCAGTCCTC CATCACTGGA AAATGTACAG ATTCCTTCTC TGGAAATATC TAAAGAAAAG      180
TACAGCTAAT GTTCCCCCAT TTCGTGTTGT TTTGTTGCTG CTTTAACTAT GAACTCATCT      240
GGCCGGGCGC AGTGACCAAG CCGCCGGGAG CTGGGGAGAG ACGCACCGGG GCGGCGACTG      300
GGCCAGGAGA CCAGAACT CGAG                                         324

```

## (2) INFORMATION FOR SEQ ID NO:31:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

```

GAATTCGGCC AAAGAGGCCT AGGAGCAGAT TCCTCATGGT GCTTGTTTAT TATATATATT      60
TAATCCTGCT TGACACTTTA CCCAAGGGAG ATGGTCCCTT TTATCAGTTG AATGTTAGCA      120
GCGTTATTTC AGAGTGTGGT GACTGGTTAG AGAACTCAT GTACTCAACC AGCCACAGTT      180
TCAAACAAA TTTTATGTG CAAAGGACAG CAACCTTCTT GTATGTTAA CCACCACTAC      240
TCGAG                                         245

```

## (2) INFORMATION FOR SEQ ID NO:32:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

```

GAATTCGGCC AAAGAGGCCT AGGTGCTTTG GTTTTGCTT TTTTAGTCAT CCCCATGAGA      60
ATAATAAACT CCATGAGGGC AGCAACTTGG CTGGCTGTG TGCCAGTGCT GGGGACATCA      120
CTGAGAAATG AAGGCCCAT TGGCAGGCTA TTTTGAGCA AGATTCCTGA GGCCCAATCG      180
TTGGGTGATG AGATGGACCC GAGGTATTTC ACTCCAGCTC TCGAG                                         225

```

## (2) INFORMATION FOR SEQ ID NO:33:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

```
GCCAAAGAGG CCTAGAGAGC TCTGGGGGGC AACCTGGAGG TCTGAAAAGA GGAGCCAGAG      60
AAGGTGGTAC CAGGCTTCCT GGTCAGAACC GGCCTGGAGC TCCTTCCCTT CCCCCTGGCC      120
TGAGAGGTTG CTTTAAAGTC TTCCACCCCT TGTTCATCT GCCTCCAAC CCATCGGAAA      180
GGAATCCACA TCATATTGGA GATGACCCCA TCAACCCAG GGCTCCAGCA CTACCAAGTT      240
GGAATTCCAC GCCCAGGAGT GGGGTAGAGG AAGACGAGAC AGGACGAGGC AGAAAAGCAC      300
ATTTTAAAAA CCAGACAAGA TGGCTAGGCC ATCACCAACC AACGGACTTA CCTTACATT      360
TTGTAGGTAA TTCCCCCAA ATCTTGATTT TTTTTCCT CAATTATCCT TAAAAAATA      420
AGAAAACACA TTCAAACCC ACTCGAG                                     447
```

(2) INFORMATION FOR SEQ ID NO:34:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 402 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

```
GCGATTGAAT TCTAGACCAT GCCTGCTCTG GGGCCAGCTC TTCTCCAGGC TCTCTGGGCC      60
GGGTGGGTCC TCACCTCCA GCCCCTCCA CCAACTGCAT TCACTCCAA TGGCACGTAT      120
CTGCAGCACC TGGCAAGGGA CCCCACCTCA GGCACCTCT ACCTGGGGGC TACCAACTTC      180
CTGTTCCAGC TGAGCCCTGG GCTGCAGCTG GAGGCCACAG TGTCCACCGG CCCTGTGCTA      240
GACAGCAGGG ACTGCCTGCC ACCTGTGATG CCTGATGAGT GCCCCCAGGC CCAGCCTACC      300
AACAAACCGA ATCAGCTGCT CCTGGTGAGC CCAGGGGCC TGGTGGTATG CGGGAGCGTG      360
CACCAGGGGG TCTGTGAACA GCGGCGCTG GGCAGCTCG AG                                     402
```

(2) INFORMATION FOR SEQ ID NO:35:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 307 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

```
GAATTCGGCC AAAGAGGCCT AGTGAAGAT TTGGGTACTG TCTTTAATAA ATCAATCAAT      60
CGACTCTTAT TTCAAGGAGA AAGTTCTATG TTATATGTTG AAGGTGAACA GATCATATTT      120
AGAGGATATA ACAATTAGAA ATCTAGAAAA TAATTATCAC TTTTATAAAA TTTTGTAGTCA      180
ACTGTACAAA TAATTACATA AAACATCAAT TAATTATGCT TAAAAATCAC TAATGTTTAT      240
AATATATAAT CACTATTTGT AATCAAAAGT TTAATTTTAT GCCAAAAAT AAAAAATGCT      300
TACTCGA                                     307
```

(2) INFORMATION FOR SEQ ID NO:36:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 324 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

GAATTCGGCC	AAAGAGGCCT	ACTTCCATAA	CCGTGCTTTT	GACGTTAAAA	ATTTTAAATT	60
CAGCCTTTTG	GAGAACACTA	AGTATCTTAG	TGTGTTTTTA	CTTACTATAA	TAATATTATT	120
GACCTAGTGT	AATATTACTG	CCATATGGAC	CTCAAGGGTA	CTTTTCTGAT	AAATTTCTGT	180
TATGGTTTCA	TAATTAAACA	AAAGGATAAT	ATACAGAGTT	GTGGAGTTTT	TTTGGTTTTG	240
TTTTGTTTTG	AGATAGCCTG	GGCAACGAGT	GAAACTCTGT	CACACACACA	CACACACACA	300
CACAGACACA	CACCAAATCT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 426 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

GAATTCGGCT	TCATGGCCTA	CAAGAAGATG	AAGAAGATTG	TGGATGCCGT	GATCAAGTAC	60
AAGGACAGCA	GTGGACGTCA	GCTCAGCGAG	GTCTTCATCC	AGCTGCCCTC	GCGAAAGGAG	120
CTGCCCCGAGT	ACTACGAGCT	CATCCGCAAG	CCCCTGGACT	TCAAGAAGAT	AAAGGAGCGC	180
ATTCGCAACC	ACAAGTACCG	CAGCCTCAAC	GACCTAGAGA	AGGACGTCAT	GCTCCTGTGC	240
CAGAACGCAC	AGACCTTCAA	CCTGGAGGGC	TCCCTGATCT	ATGAAGACTC	CATCGTCTTG	300
CAGTCGGTCT	TCACCAGCGT	GCGGCAGAAA	ATCGAGAAGG	AGGATGACAG	TGAAGGCGAG	360
GAGAGTGAGG	AGGAGGAAGA	GGGCGAGGAG	GAAGGCTCCG	AATCCGAATC	TCGGTCCAGT	420
CTCGAG						426

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 482 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

GAATTCGGCC	TTTCATGGCCA	ACACATAATC	CACGCTCATC	TTGCAAAGCG	CTATTTTCAGG	60
CACATCATTG	GAATACAGGA	AGTAGCCCTG	CACCTGCCAG	TGAGCTCGCC	ATTCAGTGAT	120
TGGAAGAGTG	ACCTGGCATC	TTGGAAATCA	TTGTGTGTCT	TCAGGAGAAT	GTGCAGTGTC	180
TTGTAACAAC	TAATTATAAT	GCAAATTAGG	GCTACATTGT	AATCTGCTTT	GTTAATGAAA	240
ATGATAAAAC	AGAATATTGA	CAAGCTAGGA	CACCTGTGGT	ATCTTTAATT	GTATCTCCTT	300
CAGAAGTTTG	CTTCTTATGG	TATAATAAAG	TATGGAAGAA	TATTGAGTAT	ATGTTTACTC	360
TGGGCCTGGG	AGAACTTAAC	TTTCTAGAGC	AGTTTGTTGA	CTTGTGTGCA	ATGGGGAGAG	420
GTACCATGAT	GAACTCACA	GGGAGCCACT	GTTCACTGAC	ACTTGAAGG	CCCTGCCTCG	480
AG						482

(2) INFORMATION FOR SEQ ID NO:39:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 363 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

```
GTGTTTGCCC ACACCCTCCT TGAATTTAAC TGCCACAATC TATCCGCAGA TGTGTTTGT      60
TCTGTTTCTT GTTTTTCAC T AGCGTTTGCG TTGCTTCCTC TGAAGCCAGA GGGTGAAAGG      120
CCCTAGCAAA GTTAGTTATC AGTCAACTGA TGATAACTGT GATCCTTAAA GATGAATTCC      180
CAGCCTGAGG TGACACACAG AGGTTTCAGCA GACGTCTCAG GATCTGTCAC ATGTCATGTT      240
GCTTGGTGTG AAGATGGAAG AACAAAGTCC ACATCAGTTT CTGCTCCTTC AAACAGTGTG      300
TCGATATGAA ACATTGAGAT TTGGCAGAAA CATGTGCCTA GTTTGCAGCA CCAAATACTC      363
GAG
```

(2) INFORMATION FOR SEQ ID NO:40:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 336 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

```
GAATTCGGCC TTCATGGCCT AAAGGGATAT TCACTCAAAT CCCTAAGTAT TTCAGAAACA      60
GCCTGAGAGC AAGTCCTTGG CTTCGCTTTC TAGTTTAAAA AGGCTTTTAA CTGTTTAGTC      120
TGAGATTCCC CTAAAAGTTC CAGGAAAGCA AACTCAAAAA GAGCCTAGGT GGTCAATCAT      180
TATTTTGTCT GCGTTTATAT AAATAATCAG GCCAAGTTAA TGAGACTAAA CTTATTTTGC      240
AAGCAAATCA GTCTTGCTT ATTTTGGTA GGAATGGGGG TAAATGGAGA GAGAGAAATT      300
ATGTTTCAGA AGAAAATAT AGCACACCAA CTCGAG
```

(2) INFORMATION FOR SEQ ID NO:41:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 251 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

```
GAATTCGGCC TTCATGGCCT AGTGGGAAAC ATTATTTCAA GACATTAGGG ATAAGAATGC      60
CAGTTGCTAC TGAGTTGGTT ATTGTTTCAA GGATTTATCA ATACATAGAG CAAATAATTA      120
TGTTTGTCTT TGTCTTATTT TTATTTCTTT ACTTTAGAAA CAGTACAGCT ACTTACAAAT      180
CAAGTTTAGA ACTCTCAGGT TATCTTAAAT CTGAAGCTTC TACCTTCCTA AGAACAAAAC      240
ACCGGCTCGA G
```

(2) INFORMATION FOR SEQ ID NO:42:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 265 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

GTTCAACCAG	TTCAAATACT	TTTTCAACCT	CTATTTCTTA	CTTCTTGCCT	GCTCTCAGTT	60
TGTTCCCGAA	ATGAGACTTG	GTGCACTCTA	TACCTACTGG	GTTCCCTGG	GCTTCGTGCT	120
GGCCGTCACT	GTCATCCGTG	AGGCGGTGGA	GGAGATCCGA	TGCTACGTGC	GGGACAAGGA	180
AGTCAACTCC	CAGGTCTACA	GCCGGCTCAC	AGCACGAGGC	ACAGTGAAGG	TGAAGAGTTC	240
TAACATCCAA	GTTGGAGCCC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:43:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 437 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

GAATTCGGCC	TTTCATGGCCT	AAGATGATTG	TGCTATTATT	GTTTGCCTTG	CTCTGGATGG	60
TGGAAGGAGT	CTTTTCCAG	CTTCACTACA	CGGTACAGGA	GGAGCAGGAA	CATGGCACTT	120
TCGTGGGGAA	TATCGCTGAA	GATCTGGGTC	TGGACATTAC	AAAACCTTCG	GCTCGCGGGT	180
TTCAGACGGT	GCCCAACTCA	AGGACCCCTT	ACTTAGACCT	CAACCTGGAG	ACAGGGGTGC	240
TGTACGTGAA	CGAGAAAATA	GACCGCGAAC	AAATCTGCAA	ACAGAGCCCC	TCCTGTGTCC	300
TGCACCTGGA	GGTCTTTCTG	GAGAACCCCC	TGGAGCTGTT	CCAGGTGGAG	ATCGAGGTGC	360
TGGACATTAA	TGACAACCCC	CCCTCTTTCC	CGGAGCCAGA	CCTGACGGTG	GAAATCTCTG	420
AGGGCGCCAC	ACTCGAG					437

(2) INFORMATION FOR SEQ ID NO:44:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 242 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

GAATTCGGCC	TTTCATGGCCT	AGTACCTTAA	AACTTTTGGGA	AATAATAATA	ATAATAATAA	60
ACAAAAAATA	ATCCCAAACC	CCGTAAGTTT	AACTTTCTAT	GCTTTGGCTG	TTTTTGGTTT	120
ATTTTTTGTT	TTTTAGAAGG	GGTCTCGCTC	TGTCGCCCAG	AATGGAGTGC	AGTGGCTTAA	180
TCAGGGCTCA	TTGCAGCCTC	GACCTCCTTG	GTTTCGGGCGA	TCCTCCTCCC	TCCACACTCG	240
AG						242

(2) INFORMATION FOR SEQ ID NO:45:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 264 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

AATTAAATTA AATTAAAATC TTTGTTACAA ACTATGAAAA TGAATATAAG TAAATTTTCAT	60
ATCATTTTCTT TTCTAGATTT ATTATCTAGG ATAGATTTGG ATGAACTAAT GAAAAAAGAT	120
GAACCGCCTC TTGATTTTCC TGATACCTG GAAGGATTG AATATGCTTT TAATGAAAAG	180
GGACAGTTAA GACACATAAA AACTGGGGAA CCATTTGTTT TTAAC TACCG GGAAGATTTA	240
CACAGATGGA ACCAGAAGCT CGAG	264

(2) INFORMATION FOR SEQ ID NO:46:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

GAATTCGGCC TTCATGGCCT AACCTGGAGA AACTATTTAA GTTGGATGAA GCAAGTGCCC	60
AGCTCCTTGC TTATAAGGAA AAAGGCCATT CTCAGAGTTC ACAATTTTCC TCTGATCAAG	120
AAATAGCTCA TCTGCTGCCT GAAAATGTGA GTGCGCTCCC AGCTACGGTG GCAGTTGCTT	180
CTCCACATAC CACCTCGGCT ACTCCAAAGC CCGCCACCCT TCTACCCACC AATGCTTCAG	240
TGACACCTTC TGGGACTTCC CAGCCACAGC TGGCCACCAC AGCTCCACCT GTAACCACTG	300
TCACTTCTCA GCCTCCACG ACCCTCATT CTACAGTTTT TACACGGGCT GCGGCTACAC	360
TCCAAGCAAT GGCTACAACA GCAGTTCTGA CTACCACCTT TCAGGCACCA TAGTGACTCG	420
AG	422

(2) INFORMATION FOR SEQ ID NO:47:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

GAATTCGGCC TTCATGGCCT ACCGAAGGGC ATCCCATCGG TTGGGTAGGT CATGGTTAAA	60
AAATCATCTC CTTTGTTGTC ATATTTAATT ATTTTCCACT ATTTTTCCT CACACAAAAT	120
GATTTTGCCC GGTACCCTTT TTGGGGGTGC ACAGTCCATG AGATGAATAT TGAATGGGGA	180
GACCTGGGTT CTAGTCTCGC ATTTACCAGT CAGGTTACAA TGCGACCTTG AGCAAGTCAC	240
TTCACCTCCC AGCGCCTCAG TTTCTCATT GTAAGATAGG AAAAGCCTTG TCATTTTAA	300
AATTTTATTT TTTGCATATA CCTCATGGCG AACTCGAG	338

(2) INFORMATION FOR SEQ ID NO:48:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

GAATTCGGCC	TTCATGGCCT	ACTATGCTCT	GCACGTGGGT	CATTTCTTAC	TGGTTTCTAA	60
AAGCCTTTCA	TTTTCTGCCT	GTACACAATA	GCCCCCTTCC	TCCATTGTTT	TTAGGATCCT	120
TTTTCTCTT	ACCAGCTGTT	AACCTGGAAG	TATTTCTTCT	TCATCCCGAA	TCTCCCATGT	180
CCTCCCCACT	TCTATTGTT	TCCATCCAAT	GTGGATTCAT	GATCATTTTA	TGGATTTTAA	240
ACTACTCTGG	GGCTACCCTC	GAG				263

(2) INFORMATION FOR SEQ ID NO:49:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

GAATTCGGCC	TTCATGGCCT	AGAAACACAT	GTGATCTGTA	CTCATGAGAA	CCTGTAGTTA	60
ACTATACGAG	CCTTGCTGTG	CATTTTGTTT	TTATCTGAGC	CTGTCTTTCA	ATGTCCTATC	120
CCTTGAGAGA	ACTGAGGGCT	GAGAACCAAG	CTTTCCGAAG	CGGTCTGAGT	GTGAGCGGTG	180
GTAGTGGTCT	CTGGAGAAAA	GAATGGAGAC	AGGATAGGAC	TTGGAGAAGA	GTGAGTCATT	240
GTTACCCAGA	AACCTGGAG	AACACTGGAC	TCGAG			275

(2) INFORMATION FOR SEQ ID NO:50:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

GGGCGTTCTC	ACGCCGCAA	CAATTCCTGA	GTAGGGCCTT	GCTTGAGTTC	TTCGGAAAGT	60
CTCATCCACC	CCCACATCGC	CTCTTTAGGA	AGTCACTTAA	TGTTGGGCTT	CATTATTCCC	120
ACATCCCTTT	CCTTACTACT	TGCCTGCACT	TCTTGAGAAA	AAGACTGCAG	AAAGGAGAGG	180
TGGGGCTTTT	AGTAGAAACA	AGCAAACCGC	AGGTCCCTGT	GGGGGGACTC	TCCAGGAAGA	240
AGGGTAATTT	CCTGCCTCCT	TAAATTGGCT	GCTACTGTCA	GTTATTTTGC	TCCCAACCCC	300
AGAGCTTCAC	TTGCTCCTTC	ACTTCCCAGT	TCCGCAAGAA	CCGTGGGCGA	CAGTTATGGA	360
GAAGCGTCTG	CAGGAGGCTC	AGCTGTACAA	GGAGGAAGGG	AACCAGCGCT	ACCGGGAAGG	420
GAAGTACCGA	GATGCTGTGA	GTAGGTACCA	TCGAGCTCTG	CTTCAGCTGC	GGGGTCTGGA	480
TCCGAGTCTG	CCCTCTCCGT	TACCTAATCT	CGGACCTCAG	GGCCCGGCCC	TCACGCCTGA	540
ACGACCTGCC	TCGAG					555

(2) INFORMATION FOR SEQ ID NO:51:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

GTGAAGATGG	ACTGCTCTGG	GGCCCATGTG	CAAGTGACCT	GTGCCAAGCT	CATCTCCAGG	60
ACAGGCCACC	TGATGAAGCT	TCTCAGTGGG	CAGCAGGAAG	TAAAGGCATC	CAAGATAGAA	120
TGGGATACGG	ACCAATGGAA	GATTGAGAAC	TACATTAATG	AGAGCACAGA	AGCCCAGAGT	180
GAACAGAAAG	AGAAGTCGCT	TGAGCTCAAA	AAAGAAGTTC	CAGGATATGG	CTATACTGAC	240
AAACTCATCT	TGGCATTAAAT	TGTTACTGGA	ATACTAACGA	TTTTGATTAT	ACTTTTCTGC	300
CTCATTGTGA	TATGTTGTCA	CCGAAGGTCA	TTACAAGAAG	ATGAAGAAGG	ATCACTCGAG	360

(2) INFORMATION FOR SEQ ID NO:52:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 621 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

GAATTCGGCC	TTCATGGCCT	AGCTCCTGCG	TAAAGGAGCA	TGAGAGCGTG	GGAGTTTTCG	60
AGTGGCCGTG	GGGTTCTTCG	TCGCGTCTCG	GTCGGGCGTC	GCTTTCTGCA	GCTCCTGTCA	120
GGGAGCGCGA	GGCCTGTTAT	TAACCGCGGA	GCGCTTTGTC	ACGAANTCCC	TGTGGCGTCT	180
TGAAGAAGGC	ATTCCCCACC	CGCCAAATGG	CGTCCATGCC	CCCGACGCCC	GAGGCCCAGG	240
AGAGTCGAGG	TACCTTTTTT	GTCCAAGTTT	ATNGCTGCTT	TCGGTCTCTG	CCTGACCCCN	300
TCCTTTGGAG	GAGAGTTGGG	CATGCCTGTT	GTGGTAGGAG	TGCTCNTGAG	CCCCAAATAG	360
CCCTTTGACC	AAGTGTCTTT	CGTTCCAAGA	CCACACACAT	AATGGTTTAC	CAACTTCNTT	420
CTTTCAGAAC	TACCAACTGG	GAGCAGGGAC	CTGTGGAGGA	ATCTCTGAGA	GAGTTTCTCA	480
ATGCTTATAT	TGTTTGTTTT	GTTTGTTTTG	GAGATAGGGT	CTGGCCTTGT	CGCTGGAGTG	540
TTGCTTGTCT	GGCTGGAGTG	CAGTGCTGAT	ATCATAGCTC	CGTCTGGAAC	TCAGGGAATC	600
CTTACGCCTC	AGCCTCTCGA	G				621

(2) INFORMATION FOR SEQ ID NO:53:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

GAATTCGGCC	TTCATGGCCT	ACAATTGGA	GCAAGGCTTA	GCAGAAGACG	GCGGCATGAG	60
CAGCGTGACT	CAGGAGGGCA	GACAAGCCTC	TATCCGGCTG	TGGAGGTCAC	GTCTGGGCGG	120
GGTGATGTAC	TCCATGGCAA	ACTGTCTGCT	CCTGATGAAG	GATTATGTGC	TGGCCGTGGA	180
GGCGTATCAT	TCGGTTATCA	AGTATTACCC	AGAGCAAGAG	CCCCAGCTGC	TCAGCGGCAT	240
CGGCCGGATT	TCCCTGCAGA	TTGGAGACAT	AAAAACAGCT	GAAAAGTATT	TTCAAGACGT	300
TGAGAAAAGTA	ACACAGAAAT	TAGACGGACC	TCTCGAG			337

(2) INFORMATION FOR SEQ ID NO:54:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

GAATTCGGCC	AAAGAGGCCT	ACATTACTGG	GTTAGAAAAC	AAAGAGGGAG	TGCCCTGCAC	60
ATTTTCTTTT	GTGCTTTTAA	ATGTTTCTTA	AGTTGGAACA	GGTTTCCTCG	GGCCTGTTTT	120
GACTGATTGC	TGGAGTGCAT	TTGATAGTTA	AAAATTACTA	ATTGGTTTTA	TTTCCTTCA	180
CACTCTGCCT	CCCCTATTTC	CCCCAATTGA	CCCTAAACCT	CGAG		224

(2) INFORMATION FOR SEQ ID NO:55:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 249 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

GATTTAATGC	ATGCTAGCAA	CAGCCTTAAC	TTTGGATTCA	GTTATTTGAA	ACACTTTTCC	60
GGCATCTTTC	CCTTTCTAAT	GTTGTGGGGT	GGAAACCGGA	TGGCAAATCA	CTGTGAGCCG	120
GATACCTCAG	CACAGTCCAC	CTTGTGTGTG	ACTTCACAAA	TGGGGGACTT	CACAAATGGG	180
GTAATGAAT	GTTATTACTT	TCAAATTTTG	ACATGGAGCA	TTATGATCAA	GGAAATGGAG	240
CAACTCGAG						249

(2) INFORMATION FOR SEQ ID NO:56:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 257 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

GCTGCGCCGC	ACCCTGAGAG	ATGGTTGGTG	CCATGTGGAA	GGTGATTGTT	TCGCTGGTCC	60
TGTTGATGCC	TGGCCCTGT	GATGGGCTGT	TTCACCCCT	ATACAGAAGT	GTTTCCATGC	120
CACCTAAGGG	AGACTCAGGA	CAGCCATTAT	TTCTACCCCC	TTACATTGAA	GCTGGGAAGA	180
TCCAAAAGG	AAGAGAATTG	AGTTTGGTCG	GTCCTTTCCC	AGGACTGAAC	ATGAAGAGTT	240
ATGCCGGCTA	CCTCGAG					257

(2) INFORMATION FOR SEQ ID NO:57:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 229 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

```

GAATTCTAGA CTTTGTCTCC AGAGCATTGC CTTTATAAGC AGATTGGCAC CAACAGTTCC      60
ATAGTTTAAAC ATCTAGTTAA GCTACAAATA TAGTATAAGC ATTATTAGCA GCTGGTACTT     120
CTGCTAGGGG TTGTAAATTC CAGGTGTTAC ACTGACCTCA ATCCAATTTA CATAATTTAC     180
ATAAATGCAT CTCGGTGGAA AAATAATCAT TTTCTTGGCA TATCTCGAG                 229

```

## (2) INFORMATION FOR SEQ ID NO:58:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

```

GAATTCGGCC TTCATGGCCT AACTGCTAT GTATGTTTTC TCCTTAATGA TGAAGAGTGT      60
AGATGATGCT AATAATAGTA GCTGATGTAC TGACTTTTAG CTGTGTGCAA AGCCATGTTC     120
AAAATACTTT ACAAGTGTTA ACTTGTTTGA TCTTCACAAC AACCCTAAGA AGTGGATATT     180
ATTAAAGTAG ATTTTGGAAG ACTGATCTAT TTAATTATTA ATAGATCTGT CTCATTCCTT     240
TTTCCCCCA ACTCGAG                 257

```

## (2) INFORMATION FOR SEQ ID NO:59:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

```

GAATTCGGCC TTCATGGCCT ACGCGTCTGC TTCGGAGACC GTAAGGATAT TGATGACCAT      60
GAGATCCCTG CTCAGAACCC CCTTCCTGTG TGGCCTGCTC TGGGCCTTTT GTGCCCCAGG     120
CGCCAGGGCC TTTTGTGCCC CAGGCGCCAG GGCTGAGGAG CCTGCAGCCA GCTTCTCCCA     180
ACCCGGCAGC ATGGGCCTGG ATAAGAACAC AGTATCACTC GAG                         223

```

## (2) INFORMATION FOR SEQ ID NO:60:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 171 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

```

GAATTCTAGA CCTGCATGTC CCAGTGTGAA ATTCAGCAC GGCATTTTCT GCATCCTTTC      60
ATGGCCATCC AAAGGATTCC GCTGCAGAAA TTATTGATGT GCTATTTTGT CTGTCTTGTC     120
ATGCAGGCTG CTTTGGGCCC CTGGGTCACCT CTTCCAAGGC TGCAACTCGA G              171

```

## (2) INFORMATION FOR SEQ ID NO:61:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

```

GAATTCGGCC TTCATGGCCT AAAAAGCAAA AGAAAAGTAA AAGGAAGAAA CAAGAACAAG      60
AAAAAAGATT ATATTGATTT TAAATCATG CAAAAACTGC AACTCTGTGT TTATATTAC      120
CTGTTTATGC TGATTGTTGC TGGTCCAGTG GATCTAAATG AGAACAGTGA GCAAAAAGAA      180
AATGTGGAAG AAGAGGGGCT GTGTAATGCA TGTACTTGGA GACAAAACAC TAAATCTTCA      240
AGAATAGAAG CCATTAAGAT ACAAATCCTC AGTAAACTTC GTCTGGAAAC AGCTCCTAAC      300
ATCAGCAAAG ATGTTATAAG ACAACTTTTA CTCGAG                                336

```

## (2) INFORMATION FOR SEQ ID NO:62:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

```

GAATTCGGCC AAAGAGGCCT AGAAGAGCAA GCGCCATGTT GAAGCCATCA TTACCATTCA      60
CATCCCTCTT ATTCCTGCAG CTGCCCCTGC TGGGAGTGGG GCTGAACACG ACAATTCTGA      120
CGCCCAATGG GAATGAAGAC ACCACAGCTG ATTTCTTCCT GACCACTATG CCCACTGACT      180
CCCTCAGTGT TTCCACTCTG CACGCTCTCG AG                                212

```

## (2) INFORMATION FOR SEQ ID NO:63:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

```

GAATTCGGCC TTCATGGTCT ATGCTACTCA GTTGGATCTA GCAGAAACAA AAGCTGAGTC      60
TGAGCAGTTG GCGCGAGGCC TTCTGGAAGA ACAGTATTTT GAATTGACGC AAGAAAGCAA      120
GAAAGCTGCT TCAAGAAATA GACAAGAGAT TACAGATAAA GATCACACTG TTAGTCGGCT      180
TGAAGAAGCA AACAGCATGC TAACCAAAGA TATTGAAATA TTAAGAAGAG AGAATGAAGA      240
GCTAACAGAG AAAATGAAGA AGGCAGAGGA AGAATATAAA CTGGAGAAGG AGGAGGAGAT      300
CAGTAATCTT AAGGCTGCCT TTGAAAAGAA TATCAACACT AAACCTCGAG              349

```

## (2) INFORMATION FOR SEQ ID NO:64:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

```

GCGGGCTAGT CATGGCGTCC CCGTCTCGGA GACTGCAGAC TAAACCAGTC ATTACTTGTT      60
TCAAGAGCGT TCTGCTAATC TACACTTTTA TTTCTGGATC ACTGGCGTTA TCCTTCTTGC      120
AGTTGGCATT TGGGGCAAGG TGAGCCTGGA GAATTACTTT TCTCTTTTAA ATGAGAAGGC      180
CACCAATGTC CCCTTCGTGC TCATTGCTAC TGGTACCGTC ATTATTCTTT TGGGCACCTT      240
TGTTTGT TTTT GCTACCTGCC GAGCTTCTGC ATGGATGCTA AACTGTATG CAATGTTTCT      300
GACTCTCGTT TTTT TGGTCG AACTGGTCGC TGCCATCGTA GGATTGTTT TCAGACATGA      360
GATTAAGAAC AGCTTAAAGA ATAATCTCGA G                                     391

```

(2) INFORMATION FOR SEQ ID NO:65:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

```

GAATTCGGCC TTCATGGCCT AGGGAGTCTG AAGCAATTTC TGAAGAAGAC CAAAAAGAAC      60
CACAAGACGA TGAATGAAAA GGCGATGGAAG CGTTGGTGCA CACAAATCCT CTCTGCCCTA      120
AGCTACCTGC ACTCCTGTGA CCCCCCATC ATCCATGGGA ACCTGACCTG TGACACCATC      180
TTCATCCAGC ACAACGGACT CATCAAGATT GGCTCTGTGG CTCCTGACAC TATCAACAAT      240
CATGTGAAGA CTTGTGCGAG AGAGCAGAAG AATCTACACT TCTTTGCACC AGAGTATGGA      300
GAAGTCACTA ATGTGACAAC AGCAGTGGAC ATCTACTCCT TTGGCATGTG TGCACTGGAG      360
ATGGCAGTGC TGGAGATTCA GGGCAATGGA GAGTCCTCAT ATGTGCCACA GGAAGCCATC      420
AGCAGTGCCA TCCAGCTTCT AGAAGACCCA TTACAGAGGG AGTTCATTCA AAAGTGCCTG      480
C                                     481

```

(2) INFORMATION FOR SEQ ID NO:66:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 583 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

```

GAATTCGGCC AAAGAGGCCT ACGATTGAAT TCTAGATCTG CCCGTCTTGG CCTCGCAAAG      60
TGCTGGGATT ACAGGCGTGA ACCACTGTGC CTGGCATATT TGTCTATTAA TTTGCTTTTC      120
TTTAGATGTA TTCTAGAGGG GGGAAAATCA GTAGAAGAAC AGTTATGTAA TTCTAACAAG      180
TTCTCCATGT GTCTTGCCAT CTNGCTTTT CTCATCCTAT CAGTACTGGA TGAGAATGTT      240
TATTTCACTG AACTTTGCCA AAGAGTTTCA ACATTTTTTT GTTTAATCAT AGGAGAAAAA      300
GGTTTATCTT ATTTTAAAAA ATTTTATTT AATTCTTTCA TTACAAATGA AGTCCCAGAA      360
GTTGTATTTG TTCTTTTAGG CTGTTCTTAA TTGTTTATTG GAACAGGCAG GGTTTGAAGG      420
AGTGGGGATA CTGGGAAAGC CAGGGTGATG AGAAAATAGG AAAGGGGTCT TGTCATTGGG      480
AGGCCACTAT ACCAGTGGCC CTTGTACCAG GACTAATATG GTACTTTGAA GCTTTAAATT      540
CATTTCTTTA TTCAATAATT TTAGGCATCC CAGGATACTC GAG                                     583

```

## (2) INFORMATION FOR SEQ ID NO:67:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

```

GAATTCGGCC AAAGAGGCCT AGCTATCCGC TTTGCTATTT TAGTGGCATT ATCAAAATCA      60
CTGGAAGCAC CTGTNGTAAT ATGGTCGGTT CCAAATATAA GCTCCTCTGC CACTCTTCCT      120
CCCATACTAA CATCCATTTG TGCAAGCAGC TGGGCTCTAG TTTCAATCCA TCTGTCATTC      180
TCAGGTAACA GGGACACATG TCCAAGTGTG GGCCCCCGTG GCATGATTGT AGCTTTGTTG      240
ATAGGCATTG CATCTTTTGT GTAATATGCA ATAATGGCAT GACCAGATTC ATGATATGCT      300
GTGATGGTTT TGTTTTGTGTT ATCAATTTCC ACACCTCTTC TTTCAGGCCC CATTAGAATT      360
TTGCTCTTGG AAAACTCCAG CTCCTTCATG GTAACCATTT CTTTCCATC AACAGCTGCT      420
TTTAATGCAG CCTGGTTCAC AAGATTCTCC AACTCTGCTC CGGAAAAGCC AACAGTACCT      480
CGAG

```

## (2) INFORMATION FOR SEQ ID NO:68:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

```

GAATTCGGCC AAAGAGCCTA ATTGAATTCT AGACCGGCCT CATCGTTCTT TGCCTTCCTG      60
GTCACCATCT GCTACGCTGG AAATACATAT TTCAGTTTTA TAGCATGGAG ATCCAGGACC      120
ATACAGTGAT TTACCATTTT GATAATTAAA AGGAAAAAAA AAGGAAGACT CTCACTGTAA      180
AAACAGCTGT AGGTATAATG TATATTCCCA GAGAATTGTA TTTAACTAAT TAATGTTTTT      240
TATATTCTTA AATTTGCTCA CAAATTGTGG TTTGTTACAA TTAACTGGA TACTTATTTG      300
CAAAGTGTTG TAGCTTATAA TGAACCTTAT AGTATCTTAT TAATGTATTA ATGTCTTCAT      360
AGATCATATT TTCTTAGACA ATGTTTAAAT AGATAAATTG CTAATATTGA GAATGTGTCA      420
AGTTTGTAAG CCTAACTTTT AAGATGCCAG AACTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:69:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

```

GAATTCGGCC AAAGAGGCCT ACGGCCAAAG AGGCCTAGGT GGTGATTGAC CTAAGAAAAA      60
AGTGCTTTAA ATATCTGGAT TCTATGGGAC AAAAGGGCCA CAGGATCTGT GAGATTCTCC      120
TTCAGTATTT ACAGGATGAA AGTAAGAACC GCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:70:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

```

GAATTCGGCC AAAGAGGCCT AGTGGACTGC TACTTCCCTT TAGCACTATA TACAAACATA      60
ACTGCTACTT CCCTTTAGCC CAGGATCAAA ATAATGATTG AGTTAAAAGT TGCTTGCTTA      120
ACAAAATTTT AAAATATGGA CTTCTGTGAA TTGCTAAAAC ACATCCTTTT AACTAGGCAT      180
CTTTAAGTCT ATAGTATCTT TAAAGTTAAT TTCAAAATTT AGCAGAGCCT GGAACACAAA      240
TTATTCAGGA AATAATTCCT GAACCTACCT CTATCTTCAT AAAACGTATT GGGGCAAGAA      300
CTATTCTATT GAATTCTAGA CCTGACTCGA G                                     331

```

## (2) INFORMATION FOR SEQ ID NO:71:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

```

GAATTCGGCC AAAGAGGCCT ACCATCTGTC ACTAATATCA AAGGAGGGCC AAGGACACAG      60
CCCTGGGGGA ACTTACCAGG TCAACCCACA ATGGGTGAAT TTATAGTTTG TTAGTTAGTG      120
GTCAGTTACC AACTTCTCTG TCTGTCTAAT GCTTTGACTA AAATGTCCAG ATTATTTACC      180
TAGTTAACAA AATTAAAGAA GATTCTAAGA CCAGTTTAGC ATCATTTTCT CTGAAGTCCA      240
TAATGAATGT CTGTAAACT CTCGTCACCT TTATTTAGGT GCTTTGGGT CATTTGTTGT      300
AGGTTTCATC TCCCAAATCA ATGTCACATA TACGTCTGTA ACTTGTGTTA TCAGCTTCCT      360
TCCTAGGGCT TTAACCTCTT TTCAGTCTTA TAGCATTCCT TCCATTTTCC TTTCAGTTCA      420
CTCCAATAAA AGCTCGACAA ACTCCTGGGA GCCCCTTGGT GCTCGAG                     467

```

## (2) INFORMATION FOR SEQ ID NO:72:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

```

GAATTCGGCC AAAGAGGCCT ACGATTGAAG TCTAGATGCA CACATTCAGC TTCTGTCTCA      60
GTCCTGAGAG TGGTTGTGTT TTATTGGCTG ATGAGTTATT TCCACATATC ACATGTATAA      120
GGTATTTGAA TGAAGGTGCT TTGTAGTCAT GACACACTAC TCTTTTACTA ATTATTAATA      180
TCTTAAGATT ACAATTTGAG AGGTAGAGAT GGTATTGTTT TTAATGGGTG TGGGGGGTGG      240
TGATGATAGG TATTTTACC CTGGTAAGTG ACCTACTAGG TTTTATTAAG TGTTGCAACT      300
TGTCAGTGT GTGGATGGGA TCTCGAG                                     327

```



## (2) INFORMATION FOR SEQ ID NO:73:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 206 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

```

GAATTCGGCC AAAGAGGCCT AGTGGTGGTA TGTATTGAG TTCACAGTAT TTGTTTTATA      60
GCAGTTTTCG AAGCACATAC TGTGCCACGG ATTTTCCAC ATTATTTTGA GACAAGGGAA      120
CACAGCCATC AAAACTGATA CCATGGCCGG GCGTGGTGGT GGGTGCCTGT AGTCCCAGCT      180
ACTTGGAAC TCGGACATT CTCGAG                                         206

```

## (2) INFORMATION FOR SEQ ID NO:74:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

```

GAATTCGGCC AAAGAGGCCT CCACCATGCC CGGCCTCAAC GATATTGATT CTTGGGCTG      60
TAGTCAGTAT TGGATTATGA TCAATATTAT CACCATTAT TTTGTTGCTC CAGTTCTTCC      120
AGCTGTGGCC AATCCTTCAG TTGGATTCTT GTGCCCCATC AACATTCTCC ATCCTTCTCT      180
CGAG                                         184

```

## (2) INFORMATION FOR SEQ ID NO:75:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

```

GAATTCGGCC AAAGAGGCCG ACTTTATTAT ACCATACATA CTATAGGTAC CTGGGCACAA      60
GATAGGTCAG GGGGTACTGT ACCCCTATTT ACATGCTTAA TCACATCATA AGGTTGCAGG      120
TGGTACTTGA AATCATCACT AATGAGACAG CAAATATGTT AGACTTGCTG GCCCAGCAAG      180
CCACAGAAAT AAGGATCACC ATCTATTAGA ATAGACTGGC TTCAAACCTG AG              232

```

## (2) INFORMATION FOR SEQ ID NO:76:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

```

GAATTCGGCC AAAGAGCCTA CTAAAATTCC TTGTTTGTG TTTTAAATAT TCCATCGTTG      60
ATAGTTAATA TTCTTTTNGA GGTTTTGTTT TAGACAAAGT AATGTTTTTC TGAAATGATT      120
CTAAGACAAT TGGTCAGAAA TAGTCTCTGC TTGTTTGGTT TATGTTTGGT CAGTTGTGCT      180
TTGATTATAG ATGGTTCCTC ATCTGAGATT AAAGTGGGAC AGAACTTCAA AAGTAAAAGG      240
GTAAATGTTT GCTGTGATGC TTATGTGGCA CATGTGCTAG TCCTTGATAG TGGCGAGAAA      300
GATCTTAATT GCTCAAAGGA AGTACTCGAG                                     330

```

(2) INFORMATION FOR SEQ ID NO:77:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 507 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

```

GAATTCGGCC AAAGAGGCCT ACAGTGCATT ATGTTATTTT GTTATCTCTG CAGTAACTTT      60
CTATCATGTT ATTTATTTTC TTTGTCTTAT TTAAAGCTTC TGAGATTATG GATTTTTGTT      120
TCCTTCCCTG AAGTTAAGTG TTATCATTCC TATATAGTAC TAAGCTGTCT ACAGAATAGT      180
GGGAGTCTGC CCTCTTGAGT TGGGAAGATC CTAGTTTGAA TCCTGGCTGT GCGACTTTAA      240
AGTTCATTAA CTTCTCTTAG CCTCAGTCAC CTGAACCTCG CAGTGGGGAT CCTTATGCCT      300
CAGAGTGTCA TTGGGAGGAC TCACGAAAAT ACGCTTGAC TTTGAGTTCA GTACCTAGCC      360
TGTATGAGCC AGCATTAAAGA GGGACAGTCA TCACGCAGCG CTTTGACAC AGCTCTCACG      420
CCACATCCTT TGGCTACTGT TTTGGTAAAT CTTTACTAGT AAATGTTTCT TAAAAGCATT      480
TACATTCATG GACATGATTC CCTCGAG                                     507

```

(2) INFORMATION FOR SEQ ID NO:78:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

```

GAATTCGGCC AAAGAGGCCT AGATTGAATC TAACCTTTTT GCCTCTTCCC AAGTAGCCTA      60
TTTGAGCTAG AACAAAACCT TGTTAGCCAT TTTGGGAGAG AATAGGGAAT CTAGAGAATG      120
AAGATCTGCC CGACCTGCCT CGAG                                     144

```

(2) INFORMATION FOR SEQ ID NO:79:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

GAATTCGGCC AAAGAGGCCT AACGACGGTA ATCAAGTTTT GCTCCAGAAG CATCAAGAAA	60
CTTAGCTACT GCTTCCAAAT CAGTACCGGT TTCAGTTAAG CTTGAATAA TACAGTCTTG	120
AAACTGAGTA GGGTCAAACC TCTCTTTTTC ATCTCTTTT CTAGTTTTAA AACGCTGGCC	180
TGATAGCGTT GGCTTTTGCT GCTTTTGATT ATTCATAAAA GACACCCGAA TTTAAGGCGA	240
AGAGGAAAGA GCCAGAAATC CCCGATGTAC CGGCAACTGC GGCGCTATCT CCTCGAG	297

## (2) INFORMATION FOR SEQ ID NO:80:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

GAATTCGGCC AAAGAGGCCT AGACTGCTGG TGGTGAAGTCT CTTTCTTGT AGGTTGTGAG	60
GGCTGAAAAA GCCAATCTTA ATAGACATGA GGCTCATGTT TGCACAGTGT GCTCTCGAG	119

## (2) INFORMATION FOR SEQ ID NO:81:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

GAATTCGGCC AAAGAGGCCT ACTCAGCTGC AAAAAAGCAT ATTTTCTGTG TTTCTGGACT	60
GCACTGTNGT CCTTGCCCTC ACATAGACAC TCAGACACCC TCACAAACAC AGTAGTCTAT	120
AGTTAGGATT AAAATAGGAT CTGAACATTG AAAAGAAAGC TTTGGAAAAA AAGAGCTGGC	180
TGGCCTAAAA ACCTAAATAT ATGATGAAGA TTGTAGGACT GTCTTCCCAA GCCCATGTT	240
CATGGTGGGG CAATGGTTAT TTGGTTATTT TACTCAATTG GTTACTCTCA TTTGAAATGA	300
GGGAGGGACA TACAGAACTC GAG	323

## (2) INFORMATION FOR SEQ ID NO:82:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

GAATTCGGCC AAAGAGGCCT AGGCAAATCA GAACTCTTAA GTTGTTTCAT CCTTATTTTA	60
TTCTTAAAAT AAAGAATTTT ATTCAAATA CGGATTAATT TTTTCTCTGG GAAAAACAC	120
ACTGTAAAC ATAATTTTCT ACCTTTTAA ACGTTTACA ATTTATCCCA TCTTCTAACA	180
AGTTATGATA CTCATACCTG CCGAGGTTTC TCTAAATTG TCGCTGGTCT TCTTTTCTCT	240

CCATTTCCAA GGCTTAAAGA TTTTACCAAT GGTGGATAGT TTCCCCTTTC TTTTGAAGGG	300
AGGTGTTTGG GAACCTGCTG TGGGGCCATC TGAGTTTGCT ATAGAAGCTT TGTCCAGTCC	350
GTCAACTGAG CCGGAGATGT GGACCCGGAG CGGGCGGCC CTGCTCGAG	409

## (2) INFORMATION FOR SEQ ID NO:83:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

GAATTCGGCC AAAGAGGCCT ATAAATATAT AATTGACTTA TTTATTAAAT TTAGGAGAAA	60
AAAAAAGTTT TCCTTGACAT TCAGCTCTAT TGGATTATT TCCATTTAAT TGCATCATGT	120
GTTATGTCTT GGTAAACACT CCATTTCTCG TCTTGGTGGG CATCCTGTCT GTGTACCTGT	180
GCAGTACACT TTAATCATCA AGACTTCAAA GTGCTTTTGA GCTATCAAAT CTTGGGAGAG	240
TCCCATCTAG CATCTTAATA ATTATTTTTC CAAGTTCGTT ATAATTAACCT CCTTTAACCT	300
CATCTCATT AATCAATTTT GTATTATCAT TCTGTTGTTT TCTGGAAAGC AGCCAATTGT	360
TCAGCTCTTG AATCAGAATT TTCAAAGACT CACCTCTCTT ACCTGGGCTT GCACATATTT	420
GTCTTAAGTA ATTCTCTATC CCTTAAACCT CTGAGCCCTC GAG	463

## (2) INFORMATION FOR SEQ ID NO:84:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

GAATTCGGCC AAAGAGGCCT AATTTGTAA AAAGGAATAT CATTCTTTGA TTTTAGATCT	60
TAGACATCAG GCACTGACAT AGAGCTTAGA TATGTTCTTA AGGTAGCTAA GCCATTTATT	120
ATAGGATAGT CAGATAGGAT AGTTCTAGGA TTTATAGACC TTTTCAGATA CTCCTTATCC	180
AGTGAGAGAT GACCTATTTT TATTAAACT TGGGTTTGGT ATCTTGAAT TGGCTTGAAG	240
ATGATTTGTT TTTACATTGG ATGTGAACGG AAAGTTTGTG TCTCAAATGT TTTACCACCT	300
GAAGGGACAG CTCGAG	316

## (2) INFORMATION FOR SEQ ID NO:85:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

GTGGACATGG AAGTAGGTGA GGTGGGGGA CCTATGAAGA AAAAAAGAGC CTTTCCACTG	60
GGCAGTGAAG TGTGTACACA CACACTGGGG GCAGAGCAGT GTGAAAACAT TCTGCACCAG	120
CACACAAATG ACTTTTGGCA AATCATCTNC CTGATCTGTC GGATGTTACG TCTCTGCAGA	180

ATCTGGAGAA AACCAGAAAA CCCAGCTTGT TTGCCCTCAT TTTGGCAGTT TAATTTAGGA	240
ATCACACTGG CTTTACATAA ACTCTTTACC AAAAAAACTG TATTCTGTAT TTTGAAGGCA	300
CAAGTTAACA TGGGCCCAAG GGAAGGAAGC ATTGTATACA ATTACATAAT AGCTACTCTA	360
TTACTTTAAA ACCTAATGGC AGCCTCGGGC AGAAAAAGTCA AAAGGGGAGA GAAACCATTT	420
CTGTGAAATT ATCTGATGCA ATCATCTCTT TGGAGACATT GTCAGTTGAC AATGGTTCTG	480
CTTTTCTCT CGAG	494

## (2) INFORMATION FOR SEQ ID NO:86:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 507 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

GAATTCGGCC AAAGAGGCCT ACGGGAGCAG TTCATGCAGC ACCTCTACCC ACAGAGAAAA	60
CCTCTTGTGT TGGGAAGGGAT TGATTTGGGG CCATGTACAA GCAAATGGAC AGTGGATTAC	120
CTAAGCCAAG TTGGAGGGAA GAAAGAAGTA AAGATTCATG TTGCTGCAGT TGCACAGATG	180
GACTTCATTA AACTTTACCT TTTGACCACT TGGTCCAGAG GGCAGCTGAA GAGAAACATA	240
AAGAATTCTT TGTTTCAGAG GATGAGAAAT ACTACTTACG GTCAGTTGGA GAAGACCCTA	300
GAAAGGATGT TGCAGATATC AGAAAGCAGT TTCCTTTGTT GAAAGGAGAT ATTAAGTTTC	360
CAGAATTCTT CAAAGAGGAA CAGTTCTTTT CCAGTGTTTT TCGAATTAGT TCACCAGGAT	420
TACAACTATG GACTCATTAT GATGTAATGG ATAATTGTTT AATACAAGTG ACAGGAAAAA	480
AGCGTGTGTT ACTCTTCAGT CCTCGAG	507

## (2) INFORMATION FOR SEQ ID NO:87:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

GAATTCGGCC AAAGAGGCCT AGCTTATCCA GTCTAGTAAT TTTTTTTGTA TGTGTGCACA	60
GCACAAATAG TTACAATAGT TCCCTTTTTT GACATCAAAT TCAACAATAC CTGGCATATA	120
ATTGCTAAAT ACTGTCATCA TTTTCATTAT CATTATCCCC CACATAGTCA TAAATAAGCA	180
CACATGCTAA TCTTCAACTC TTCTTCTATT ATTTGCTGCC TTCTTACCTG CGTTAGTGAG	240
AAAGTGCCTT CAAATAGATT GCCAACAGTT ATATGGCTCG AG	282

## (2) INFORMATION FOR SEQ ID NO:88:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

```

GAATTCGGCC AAAGAGGCCT AGTGCAGTAT TCACGTGTAA CTTTAAAGTT TTCAGTACAG      60
TGCTTTTATA CCTTTAATGC AATGTTGTAT TCATTGGGT ACTATTGTGT AGTATTTAGG      120
ATGTATGCAT GTTTGTTTAT ATGTAAGCTT GGTGGTGCT TTCGCTTTTG TGCTACCTTT      180
CTTGGATTTT TGTACCAGAG ATGTGCTAAA CTGATGAAAT ACATTGAGAA AGTTTCCATC      240
TTATTCTTTT ATATGGGACT GATGATGTGT GTTGGGGTAG ACTGCTCCTG CAGAGTTTGG      300
AAGAAGTCAC CAGCAAAGCC GGCCAATCTC GAG                                     333

```

## (2) INFORMATION FOR SEQ ID NO:89:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 391 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

```

GAATTCGGCC AAAGAGGCCT AGGTTTCTAG ACTGGAAGAA CAAATGAATG GCTTAAAAAC      60
ATCAAATGAA CATCTTCAA AGCATGTGGA GGATCTGTTG ACCAAATTAA AAGAGGCCAA      120
GGAACAACAG GCCAGTATGG AAGAGAAATT CCACAATGAA TTAAATGCC ACATAAACT      180
TTCTAATTTG TACAAGAGTG CCGCTGATGA CTCAGAAGCA AAGAGCAATG AACTAACCCG      240
GGCAGTAGAG GAACTACACA AACTTTTGAA GGAAGACAAG GAACGCNAGA AAAAAGACGA      300
AGAAAAGGTG AAGGCAGAGG AAGAATCAAA GAAAAAAGAA GAGGAAGAAA AAAAGAAACA      360
TCAAGAGGAA GAGAGAAAGA AGCAACTCGA G                                     391

```

## (2) INFORMATION FOR SEQ ID NO:90:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 339 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

```

GAATTCGGCC AAAGAGGCCT AGCTTCTCTG CTTTATTTAT TCATTTATTT TTAATTTTTT      60
GAGATGAAGT CTCGCTCTGT CATCCAGGCT GGAGTGTGGT AGCGCCATCT CAGCTCACTG      120
CAACTTCCAC CTCCCAGGTT CAAGTGCAAT GTCTTTTAA TGTCTATGTG AAGGATTCTG      180
AGCTGTACGA GTTCTGCCCC AAATCTGCAC TTGGGCCTCA GGATCAGGCC GCCTCCCCAT      240
CAATCTGGTG GATGCCAGTT ATAACCTTTG CCTGCACCC CATCCACACT GTAGTTCAGA      300
GAAAATCAAC AGTCAGCAAT CATATCACA GCACTCGAG                                     339

```

## (2) INFORMATION FOR SEQ ID NO:91:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 203 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

```

GAATTCGGCC AAAGAGGCCT ACGAGTCAGC ATCTAGACTC AGCTCCTTCT TCCCGCCTGC      60

```

```

CCTCACACAT GCGTGCATTC ACTCTCCTGT CCAGGCTCAT GTCCTTGTGC CCGCTTGCTG      120
CTTTGCTCC TTGCTTGTTC CTGACTTGCT CACCCACTCT CTGTCAATTGT CTTGCTTACT      180
CAGGCTCACC CTATCAACTC GAG                                              203

```

## (2) INFORMATION FOR SEQ ID NO:92:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 127 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

```

GAATTCGGCC AAAGAGGCCT AGTTGAATTA TTGCCACATG TTAGGAATGT GGAAGGTTGC      60
TTGGATAAAT GAGAAAAGAA AGAAAAGAAT GCAAGTAATG TCCTGCTGGG GTAGTGCAGT      120
CCTCGAG                                              127

```

## (2) INFORMATION FOR SEQ ID NO:93:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 179 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

```

GAATTCGGCC AAAGAGGCCT AGATCCACG AATTTAGGCT CAGAAGCATC GTCCTCTCC      60
AGCCCTGCAG CTATTCACCA ATATCAGTCC TCGCGGCTCT CCAGGGCTCC CTGCCCTGAC      120
CTCTTCCCTG GGTTTTCTGC CCCAGCCTCC TCCTTCCCCC CCCCCTATA TCCCTCGAG      179

```

## (2) INFORMATION FOR SEQ ID NO:94:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 326 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

```

GAATTCGGCC AAAGAGGCCT ACTGGAATCA CTAACTTTG TCTCATTTTT TTTCTCTTCC      60
ATCAAATATC AATTTTGGAT TCAGATCCAG TTTTCTTCTT TCAATTATTT CTGCCTTTTA      120
AAATAATACT ACCTCCTTCC TCCACAATT CATTTCAGCT TGTTTTAGTT CCTTGGGTTC      180
TATATTTTTT CTTCCTAGTA TTACAATATA TGCACAAATA TTAGGTTATA AAACCTCCAA      240
TACAACTTTT ACTGCCACTC ACAGGTTTTT CAATTGTTTT CATTTTCATG TACATTAAAA      300
TAATGTATAT ATTAGGGATA CTCGAG                                              326

```

## (2) INFORMATION FOR SEQ ID NO:95:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 340 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

```
GAATTCGGCC AAAGAGGCCT AAATATGAAA AGCTGTCTAT ATCTACCCAG CCAAACCATC    60
TCCAGCTTTT ACTTTTATTG AGCAAGTATA CGTTATTTAT TTAGTCATCC ATTCATTCAT    120
TTACTCATTT ATTATTTTTT TTTTCAGCTT ATTTCTGCTT TCATCTTAAT TCCTCTCTTA    180
AACTTTTTTG TATCACATTG GTTCTCCCTG ACCTCCACCA CTGTAACCTG ACTTAAGTTA    240
AATGTTTAAT TTATTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT    300
TTTAGGTAGA GAAGATGTCT CACCATGCTG CCCACTCGAG    340
```

(2) INFORMATION FOR SEQ ID NO:96:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 240 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:

```
GAATTCGGCC AAAGAGGCCT ACTTCTTCC TTATTCTACT TCTCTTTTTT TCTTTTGTTT    60
AACATCATGT TTGTGAAAGT TTCATGCATA TCGTTGCAAG TATTTGTATT TCATTCATT    120
CTATTGTTGT ATAATGTTAC ATTGCATGAA TATGCAGCAA TTTGTTCTAC TGTA AAAAGC    180
AATAAGGATT TAGTTATTTT CAGGTTGGAC ACAAATAATT TTGCTATGAA GGGTCTCGAG    240
```

(2) INFORMATION FOR SEQ ID NO:97:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:

```
GAATTCGGCC AAAGAGGCCT ATA ACTATAT AGCCTAGAAT TTTTCCTATT CTGTTATTAA    60
GCCTCTATCA CTATTCTTTG ATTCTAGGTT TTATAATCCA TTCTTTTTTA TAACAACCTG    120
TTCTTGTTTT ACTTTCCCT ATTTTGTGTT TATACCCATC TATTCTTTTT TAGGATCTAT    180
TCTCCACTTT TAACTTTGAG GATTCTAAAA TACTTACTTT AAAGTTATTT TTAACCTGTT    240
CTATTTTGTG TTTTGTGAGG AGCGAATTG CTTTTTTTAT TTGGCTGTTC TACCATGCTT    300
TTTGGAATTT TGTTTGTAG GCTTCTCGAG    330
```

(2) INFORMATION FOR SEQ ID NO:98:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 279 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

```
GAATTCGGCC TTCATGGCCT ACTCTACTCC AAGTAGGAAA AGGCCAGGAG GTCCTGTAA 60
AGGATGCACT CAGAGCCCGG GTCCTTAAC GTATGAGAGT GCTAACCAGC AGGTGTAGAC 120
TTTTCAGGAG TGAAGAATGA GGCAGGCATT CCAAACCTGG ACCTTCATCA CCTTTTGTTC 180
CATCTCAAGA CAATTCTGAG GACTGTTTT GGAGCGTGTG TGAAGGTGA ACGTTGAAGA 240
AGAGTGTGGG CTTTGATGTG ACTCAGTTGA ATACTCGAG 279
```

(2) INFORMATION FOR SEQ ID NO:99:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

```
GAATTCTCAT GAAACTCTCA GCGGAAAGCT ACAAGGAAAC ACAGATGGTG AAGATTAAAG 60
AGGAACCCAT GGAGGTTGAC ATCCAGGACT CCCATGTCTC GATATCACCC AGCCGGAATG 120
TTGGCTACAG CACTTTAATC GGGCGAGAGA AAACCGAACC CTTACAGAAG ATGCCAGAGG 180
GCAGAGTACC CCCAGAGAGA AACCTCTTCA GTCAGGATAT CTCTGTGAAA ATGGCTTCCG 240
AGTCCTCTT TCAACTGTCA GAAAAGTGA GCAAAGAGCA CAATCATACA AAAGAAAACA 300
CCATCCGGAC CAATCTCGAG 320
```

(2) INFORMATION FOR SEQ ID NO:100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

```
GAATTCGGCC TTCATGGCCT AGAGCAACAT AGTGAGACCT CATCTCTACA AAAAATAAAG 60
AGAAAATTAG TTGGGGGTGG TGGCGTGAC CTATAGTCCC AGCTACTCAG GAGGTTGAGG 120
TGGGAGGATC ACTTGAGCCC AGGAGTTTGA GGCTGCAGTG AGCTGTGGTC ATGCCACTGC 180
ACTCTAGCCT GAGTGACAGA GCAAGATCCT GTCTCAAAAA ATAAAGTAAA ATAAAATAAT 240
CAGTCAACAA CAGTGATTG TCTTCAAGCT GCCCTCCTCT TCGGCTCTCA AGGCAGTTTG 300
TGAAGTGTCT AGGATAGGAA TTTTCCAGAA GGGCTTGCTC GAG 343
```

(2) INFORMATION FOR SEQ ID NO:101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

```

GGAAGATGTG CCAAAGTTCA GAAAACATAA TCTTATCTGA TCAGATTAAA GATCACAACT      60
CCAGTGAAGC CAGATTTTCT TCAAAGAATA TTAAGGATTT GCGATTAGCA TCAGATAATG      120
TAAGCATTGA TCACTTTTGT AGAAAAAGAC ATGAACCTGA ATCTGTAGT TCTGATGTTA      180
GCGAGCAAGG CAGTATTCAT TTGGAACCTC TGACTCCATC CGAGGTACTT GAGTATGAAG      240
CCACAGAGAT TCTTCAGAAA GGTAGTGGTG ATCCTTCAGC CAAGACTGAT GAAGTAGTGT      300
CTGATCAAAC AGATGACATT CCTGGAGGAA ATAACCCNA CACTCTCGAG      350

```

## (2) INFORMATION FOR SEQ ID NO:102:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

```

GAATTCGGCC TTCATGGCCT ACTCGCGGTC TGTTAGTAGT ATAGTGATGC CAGCAGCTAG      60
GACTGGGAGA GATAGGAGAA GTAGGACTGC TGTGATTAGG ACGGATCAGA CGAAGAGGGG      120
CGTTTGGTAT TGGGTTATGG CAGGGGGTTT TATATTGATA ATTGTTGTGA TGAAATTGAT      180
GGCCCCTAAG ATAGAGGAGA CACCTGCTAG GTGTAAGGAG AAGATGGTTA GGTCTACGGA      240
GGCTCCAGGG TGGGATGAGC GGGCCAAGAT CGATGATCCC ACAGACTCCA AGCCTGAGGA      300
CTGGGACAAG CCCGAGCATA TCCCTGACCC TGATGCTAAG AAGCCCAGG ACTGGGATGA      360
AGAGATGGAC GGAGAGTGGG AACCCCCAGT GATTCAGAAC CCTGAGTACA AGGGTGAGTG      420
GAAGCCCCGG CAGCGTCTCG AG                                         442

```

## (2) INFORMATION FOR SEQ ID NO:103:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:

```

GAATTCGGCC TTCATGGCCT ACAGAAAGTA AGTTGGAACC ATGTAAGAAA AAAAGACACA      60
AATAAACTA GGAAAGTGGC ATGGAGCTAG GCGTGAAGTT GCTGCTCAGT TTACATGTAT      120
GAAGTTCTGT GTGGACTTAA GCTCCTACTT CAGTCATTTA TTGTATGACT TGGACAAGTT      180
GCCAAACATC TCTAATATTC ATTCATATTT GTAGGGTAAA AGGATGAGTA ATATGTATCT      240
TTAGTGTATA AAACATTTAC AGACAACTCG AG                                         272

```

## (2) INFORMATION FOR SEQ ID NO:104:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:

GAATTCGGCC	TTCATGGCCT	AAGACACCAG	CGAGCCCAGG	CAGGTAATGG	AAGCAACTGT	60
AGCTGACTGG	ACCTAAGAAG	CAGTGGCAGC	GGTGCCAGGC	ACCCCAGCTG	ACCTGCCTTG	120
GTGCTCAGAG	CAGCAGGGCT	GGCCATGGTC	AGGGAGTCTG	GGGAGGTCAT	GCTCTGTCCA	180
CAGGGTTCTA	GCCAGCTTCT	GCCAAATTGT	CTGTTTTTTC	TCAAGAGAAG	CTGGGAAGGC	240
CAGTTGTGGT	GTCTCATACC	TGCAATCATA	GCACTATGGG	AGGACTCGAG		290

## (2) INFORMATION FOR SEQ ID NO:105:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:

GAATTCGGCC	TTCATGGCCT	ATGAAAATTT	GGAAGAAGAA	TCCAATGAAA	GTGGTAGCCC	60
TTTTGACCCT	GTTTTGAAG	TTGAACCTAA	TCTCTAACGA	TAACCCAGAG	GAACATGTAC	120
TGAAGGTAAT	TCCTGAGGAT	GCTTCAGAAT	CTGAGGAGAA	GCTAGACCAA	AAAGAGGATG	180
GTTCAAAATA	CGAACTATT	CATTTGACTG	AGGAACCAAC	CAAACTAATG	CACAATGCAT	240
CTGATAGTGA	GGTTGACCAA	GACGATGTTG	TTGAGTGGA	AGACGGTGCT	TCTCCATCTG	300
AGAGTGGGCC	TGGATCCCAA	CTCGAG				326

## (2) INFORMATION FOR SEQ ID NO:106:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:

GAATTCGGCC	TTCATGGCCT	ATGGCAATGG	TGGTCGTGGT	GCTGGGTGGG	ATGNNGTCTT	60
CATCCTCTTC	CTCCAGGAAG	GATGCCTCTG	GGATATGGCT	GAAGGCCTCT	GGGTGCAGCC	120
TGGCCAGTTT	CCCTTTCAGC	GTCTGATAC	GGCGGAAGAT	GATGTCCAGG	TCCCGTTTCA	180
TCTCTACTAG	GGTCTCTGTG	TGGTGCAGGA	AGCGTTCGCT	CATCTGCTGC	AGGCGGGCAT	240
TGGACAGGTT	GTTGAAGTTG	AGCAGCATCT	CATTGGTCTT	CTCAAAGCGG	TCCAGCATGT	300
TCTTCTGGGA	CAGGATGATG	GCGTTGACAT	CATCTGTGTT	CACCATGCTC	AGGATGCGGC	360
CGCAGAAGAC	CCTCGAG					377

## (2) INFORMATION FOR SEQ ID NO:107:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 601 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:

GAATTCGGCC	TTCATGGCCT	ACATGACACC	ACCTGAACGT	CTCTTCCTCC	CAAGGGTGTG	60
TGGCACCACC	CTACACCTCC	TCCTTCTGGG	GCTGCTGCTG	GTTCTGCTGC	CTGGGGCCCA	120

```

GGGGCTCCCT GGTGTTGGCC TCACACCTTC AGCTGCCCAG ACTGCCCCGTC AGCACCCCAA 180
GATGCATCTT GCCCACAGCA ACCTCAAACC TGCTGCTCAC CTCATTGGAG ACCCCAGCAA 240
GCAGAACTCA CTGCTCTGGA GAGCAAACAC GGACCGTGCC TTCCTCCAGG ATGGTTTCTC 300
CTTGAGCAAC AATTCTCTCC TGGTCCCCAC CAGTGGCATC TACTTCGTCT ACTCCCAGGT 360
GGTCTTCTCT GGGAAAGCCT ACTCTCCCAA GGCCACCTCC TCCCCACTCT ACCTGGCCCA 420
TGAGGTCCAG CTCTTCTCCT CCCAGTACCC CTTCATGTG CCTCTCTCA GCTCCAGAA 480
GATGGTGTAT CCAGGGCTGC AGGAACCCTG GCTGCACTCG ATGTACCACG GGGCTGCGTT 540
CCAGCTCACC CAGGGAGACC AGCTATCCAC CCACACAGAT GGCATCCCCC ACGCACTCGA 600
G 601

```

## (2) INFORMATION FOR SEQ ID NO:108:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

```

GAATTCGGCC TTCATGGCCT ATTTTTTTTT TTTTATCAA AAGTTTGTTC TATTTTCAAT 60
ACAAGATAAA TACCATGCTT GTTACTAGTG CAGTTCTCGA G 101

```

## (2) INFORMATION FOR SEQ ID NO:109:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:

```

GAATTCGGCC TTCATGGCCT ACAGAATTGG AGGCATGATG AAGACTCTGC TGCTGTTTGT 60
GGGGCTGCTG CTGACCTGGG AGAGTGGGCA GGTCCTGGGG GACCAGACGG TCTCAGACAA 120
TGAGCTCCAG GAAATGTCCA ATCAGGGAAG TAAGTACGTC AATAAGGAAA TTCAAATGTC 180
TGTCAACGGG GTGAAACAGA TAAAGACTCT CATAGAAAAA ACAAACGAAG AGCGCAAGAC 240
ACTGCTCAGC AACCTAGAAG AAGCCAAGAA GAAGAAAGAG GATGCCCTAA ATGAGACCAG 300
GGAATCAGAG ACAAAGCTGA AGGAGCTCCC AGGAGTGTGC AATGAGACCA TGATGGCCCT 360
CTGGGAAGAG TGTAAGCCCT GCCTGAAACA GACCTGCATG AAGTTCTACG CACGCGTCTG 420
CAGAAGTGGC TCAGGCCTGG TTGGCCGCCA GCTTGAGGAG TTCCTGAACC AGAGCTCGCC 480
CTTCTACTTC TGGATGAATG GTGACACTCG AG 512

```

## (2) INFORMATION FOR SEQ ID NO:110:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:

GAATTCGGCC	TTCATGGCCT	AAATTATTAA	AGGTGACAGT	ACACAGGAAA	CATTACAATT	60
GAACAATGCC	TCAGCTATAC	ATTTACATCA	GATTATTGGG	TGCCTATTTG	TTCATCATTT	120
CTCGTGTTC	AGGACAGAAT	CTGGATAGTA	TGCTTCATGG	CACTGGGATG	AAATCAGACT	180
CCGACCAGAA	AAAGTCAGAA	AATGGAGTAA	CCTTAGCACC	AGAGGATACC	TTGCCTTTTT	240
TAAAGTGCTA	TTGCTCAGGG	CACTGTCCAG	ATGATGCTAT	TAATAACACA	TGCATACTA	300
ATGGACATTG	CTTTGCCATC	ATAGAAGAAG	ATGACCAGGG	AGAAACCACA	TTAGCTTCAG	360
GGTGTATGAA	ATATGAAGGA	TCTGATTTTC	AGTGCAAAGA	TTCTCCAAAA	GCCCAGCTAC	420
GCCGGACAAT	AGAATGTTGT	CGGACCAATT	TATGTAACCA	GTATTTGCAA	CCCACACCGC	480
TCGAG						485

## (2) INFORMATION FOR SEQ ID NO:111:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

GAATTCGGCC	TTCATGGCCT	ACACACATTG	TGAGCTGTAT	ACGTTAACCC	AAAGTCTGCA	60
TTCAAAGTGG	AATTATAACT	GGGCAGTGAA	TGAGTTGCTC	AGTCCATCTA	TTAACCATAC	120
TCTTTTAGGC	TTTTTATTGC	CTCTAATGT	TGTAATAATT	AACATTTTCC	CAGGAAGTTG	180
TTTTACAGAA	GAAGGGGCCT	TAGCGGCTTT	CAACTCTTTA	GAGATAAGTT	CAACTTTGTG	240
GATTGACCAC	AGCACATCTT	GTTTAGTAGT	GAGCGGGAGC	CATATGAATC	CTCTAGAGAC	300
ACAGCCGTGT	CTGAGATGGA	CATTGCCAAC	ACAGCTCGAG			340

## (2) INFORMATION FOR SEQ ID NO:112:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 533 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

TTCGGNCTTC	ATGGCCTACT	CTCATAAAAA	TATTCAAAGA	TCAACCCCAA	ACGTGCCTGC	60
ANTTTGGACA	ATGTNAGCTA	AAGCTATAAA	TGGAACAGCA	GTGGTCATGG	ATGATAAAGA	120
TCAATTATTT	CACCCAATTC	CAGAGTCTGA	TGTGAATGCT	ACACAGGGAG	AAAATCAGCC	180
AGATCTAGAG	GATCTGAAGA	TCAAAATAAT	GCTGGGAATC	TCGTTGANGA	CCCTCCTCCT	240
CTTTGTGGTC	CNTCTTGGCA	TTCTGTAGTG	CTACACTGTA	CAAAC TGAGG	CATCTGAGTT	300
ATAAAAGTTG	TGAGAGTCAG	TACTCTGTCA	ACCCAGAGCT	GGCCACGATG	TCTTACTTTC	360
ATCCATCAGA	AGGTGTTTCA	GATACATCCT	TTTCCAAGAG	TGCAGAGAGC	AGCACATTTT	420
TGGGTACCAC	TTCTTCAGAT	ATGAGAAGAT	CAGGCACAAG	AACATCAGAA	TCTAAGATAA	480
TGACGGATAT	CATTTCCATA	GGCTCAGATA	ATGAGATGCA	TGAAACACTC	GAG	533

## (2) INFORMATION FOR SEQ ID NO:113:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

GAATTCGGCC	AAAGAGGCCT	AGAAAATAGA	AAATCAGGTA	GCTATGTCAT	TTTATAAGCA	60
TCAGTCCTCA	CCAGATTGT	CAAGTGAAGA	AAGTGAAACA	GAAAAGGAAA	TTAAAAGGAA	120
AGCTGAAGTT	AAGAAAACCA	AAGCAGGAAA	CACCAAAGAA	GCAGTGGTTC	ACCTGAGAAA	180
GAGCACAAGA	AACACAAGTA	ATATTCCAGT	GATTTTGGAA	CCTGAAACTG	AAGAAAGTGA	240
AACAGAAAAG	GAAATTAAAA	GGAAAGCTGA	AGTTAAGAAA	ACCAAAGCAG	GAAACACCAA	300
AGAAGCAGTG	GTTACACCTG	GAAAGAGCAC	AAGAAACACC	CTCGAG		346

## (2) INFORMATION FOR SEQ ID NO:114:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

GAATTCGGCC	AAAGAGGCCT	AGGCAGGTAT	TCTTTGCTTT	GGGAAATTCT	TCTTTCTGTC	60
CTCCCTTCCC	TCACTTTTTC	CAAATTCTGG	GCACAACAGC	AGCTCTCTCT	CTTCTGTGGC	120
AGGTGTGCAT	CCTATTGGCT	GGCTGGTATT	TCTTGTTTTT	TTTCCCCCTT	ATTCTTTTTA	180
AATGGGGGTG	GGGGTATAAA	AATATGTGTA	TGGGGTACAT	GCAATAATGT	TGTAATGTTT	240
CTTGTTGTTT	AATGGATAAT	TAATTGCAAA	ATAATTGTTT	TAAITATAAC	ATGTTTGAGT	300
AAATGCTAAA	TTAGTATTTT	TTTCTAATAT	AATAATGAAT	TTGAAATCTA	GCATTCTCTG	360
ACAATGTGT	CTATGTTTGT	CTGCTGTGTG	CTGTCTAATA	GTAATTAATA	TCTGTGGTCC	420
GCACCCACTC	GAG					433

## (2) INFORMATION FOR SEQ ID NO:115:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

GAATTCGGCC	AAAGAGGCCT	AAGCAAAGCT	TAGCTTACGG	GGAAAAAATA	AAAAAATA	60
AAGTAGAGCT	TNCCTTGAAT	CTGGAGAAAT	TAAGCACACA	GGTGTCTGTC	AATATTAGTT	120
AAGAGACTAC	TGCACCCATC	ATACTGTAGC	TTAAGACAGT	TTCTTCTTTT	AGTTTTTTCT	180
AAAATGTCTC	CATGTCTGTG	TTATGCCACA	AATAACACAG	CCTTGTTTAA	CTTTTGGACT	240
AAAAAAATC	AACTTATTGG	CCAAGCATGG	TGGCTTACAC	CTATGATTGT	AGCACTTTGG	300
ATAGGTCTCG	AG					312

## (2) INFORMATION FOR SEQ ID NO:116:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:116:

```

GAATTCGGCC AAAGAGGCCT AATTTTCCTA ACTGTGTGCT GCCTTTTGGG TTAATTAGAA      60
TTGTAGCATT TCGTTTGTAT TATTTTTTTG GCTCTTTAGC TGTTCTCTCA CATTTTTTAA      120
AATGGTAACT CTAGGGATTA TAATATGCAT CTTTAATTTA TCAAAGTCTG TTTTACTAC      180
TTCGTGTAAA ATAAACGAAC CTTGCATTTA TAGTTACATT TATTCCTCTC ATCTCGAG      238

```

## (2) INFORMATION FOR SEQ ID NO:117:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:

```

GAATTCGGCC AAAGAGGCCT ACTCAAAAGT AGATGAGCAA TTGGTCAGAA TTGTTAGAGG      60
ATATTATTTG AGCTAAATGT TTCCTCTCTC TGTTTCAGTG GTGTATGTGC AAGTGTGTGT      120
ATATGTTTTT TGTTGGGGAC AGTTTCAGGT AGATGGTATG AAGAGGCAGC AGGAGACTCT      180
CGAG                                     184

```

## (2) INFORMATION FOR SEQ ID NO:118:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:

```

GAATTCGGCC TTCATGGCCT AATTTTCTAA AACCTGGAGA CAAACCACAT AAATACAAAA      60
CAAGTCTGCT TCTTCAAAAT TCTGCTGGTG AGAACTCAGA TATCAGTGAT CTTATTAGCT      120
TTTTTACAAG CCAGAACATA ATGGTGACGA TGATTAATGA CAGTGACTAT GTATCCGTGG      180
CTCCCATAG TGCGCTTTA AATGTGATGC ATTCAGAAAA GGACTATGTT TTTGCAGCTG      240
TTTTCAACAG TACTATGGTT TATTCTTTAC CTATATTAGT GAATATCATT AGTAACTACT      300
ATCTTTATCA TTAAATGTG ACTGAAACCA TCCAGCTCGA G                               341

```

## (2) INFORMATION FOR SEQ ID NO:119:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:

```

GAATTATGCT GTGCTGTTTT CCTGGACACT CAGAATCAAA CAGGCCTTCC ACCCATCCC      60
ATCATGTTGA ATTACAAAGT ATTTTGAGCA TCGTTTGGTT TGTTTCTTTC CACCCATACC      120
TGTGTAGGCG AGCGGTAGCA GTCTCAACA ATGCATCCTC TTGGACAATG CATTGTAATA      180

```

TCTCTCTTTC AAATTCTGTT TCACATAGTC ATTTCTCATG TTCTGTTGGA GACCCCCAAA 240  
AAATTCATTC CACACTGTCA TCCCTTTGTC CTAACCAGAA TCTCGAG 287

## (2) INFORMATION FOR SEQ ID NO:120:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 196 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

GAATTCGGCC TTCATGGCCT AATGTATGGT AGACAATTTT TTTTAAAGAC ACAGAGATAA 60  
ACGTTTTCTT GCTTTGGTTA CCTTTCCTTT CCCCTTTAAA AGGAATTAGC TATAGAAGTC 120  
CTTTGTAAAG ATGCTTCTTG ATATTTTACT TTTGTTCCCTT TTCCTAATC ATTCCTTTT 180  
CACCCCACTC CTCGAG 196

## (2) INFORMATION FOR SEQ ID NO:121:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 117 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:

GAATTCGGCC TTCATGGCCT AGTGATTGGG TGCAGAGGAA ACAGGAACCA GAGAAGGGTC 60  
ATCTCAGCTG CCTGTCCAC TCCCTATGCT TGGTGTTACC TGCGCCATAG TCTCGAG 117

## (2) INFORMATION FOR SEQ ID NO:122:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 234 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

GAATTCGGCC TTCATGGCCT AGTAAGTGCT CTGAGTATAT TAGGAAAAGG AAATCTTATA 60  
CATAAAAATC AAAGCTGTTG CTAATTTTTC CACTAGTGAG TCAGTCTATT AACATTACTC 120  
ATGGTAGGTT TTGCCATACA GAATTTTAAT TTTTATATAT TATTTTGGC TTTGTTATTA 180  
TGCTTAGAAG TCCATGGGGA CCCAAAGATC AGAAAAGATT CATCTGTACT CGAG 234

## (2) INFORMATION FOR SEQ ID NO:123:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 265 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

```

GAATTCGGCC TTCATGGCCT ACGGAACGAA CATTGGCTCG GCGGTGGTGA TGCTAATTCC      60
CACTGTCATG TTCACAGTGA TGGCCGTCTT TTCCTTCATC GCCCTCAGCA TGGTTCATAA      120
ATTTTACCGG GGAAGTGGGG GGAGTTTCAG CAAAGCTCAG GAGGAGTGGG CCACAGGGGC      180
CTGGAAGAAT CCACATGTGC AGCAGGCAGC CCAGAACGCA GCCATGGGGG CAGCCCAGGG      240
TGCCATGAAT CAGCCAAGAC TCGAG                                     265

```

(2) INFORMATION FOR SEQ ID NO:124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:

```

GAATTTGCCA CACCATGAAG CTCTTGTGGC AGGTAAGTGT GCACCACCAC ACCTGGAATG      60
CCATCCTGCT CCCGTTTCGT TACCTCACGG CGCAAGTGTG GATTCTGTGT GCAGCCATCG      120
CTGCTGCCGC CTCAGCCGGG CCCAGAACT GCCCTCCGT CTGCTCGTGC AGTAACCACT      180
TCAGCAAGGT GGTGTGCACG CGCCGGGGCC TCTCCGAGGT CCCGCAGGT ATTCCCTCGA      240
ACACCCGGTT CCTCGAG                                     257

```

(2) INFORMATION FOR SEQ ID NO:125:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:125:

```

GAATTCGGCC TTCATGGCCT AGGAAAGATT CGTGTTTTAC TTAAATAAAC CTGAAAGAAC      60
TGTCGTTTTT CACTGCCTAT AGGACCACTA CAAAGCCGCA AAGAAAAATT AGACTTGTTT      120
CATTTTATAA CAACAACAAC TGCTACTACT GCTACTAGTT AGATACCGTT TGCTCATTAA      180
TAACAATCTC AGTTGGTAGG ATGAAGCTTA AACACTTGGC ATTCATCGTC TTTTTCAGTC      240
CTCTCGAG                                     248

```

(2) INFORMATION FOR SEQ ID NO:126:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:

GAATTCGGCC TTCATGGCCT ACTGTCTTTT CATGCAGATT TCATATTGTC TTTGTCCTTT	60
TCATTGCTTC TTGACCTTC TGGCAGGTGT CGCTCAGTTT CTTCTGTTT CCCTTCCTGT	120
CCTCTCCACA CCTGCTATCC CGTCCCACTC CCATCTACCT CCCGGGAAGC CAGCCCTGCA	180
TGCTGAGTTT GTGACCTGCT TCATTCCCAT TTCATTTCTA GAGGGTTTAG AGGTGACCTG	240
GAACCGTTCC CTTTCCCTCT CCTACCCCT CCTCTGCAAC ACCAAGAGGC CTGGAGGGGC	300
AGACAGAAAG CAGCCAGCCA CGGCGGAAG TCTCGAG	337

## (2) INFORMATION FOR SEQ ID NO:127:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:

GAATTCGGCC TTCATGGCCT AACTTATTTT TTTGTTGAT TGCCTGTCTT TCTTTTCTT	60
TCCTTCCCTC CCTCCCTCCT TCCCTTCCTT CCTTCCTTCT GTAGAGATGA GGTTCACCA	120
TGTGGCCAGG TTGGTCCTGA GCTTAAGTGG TCCTCGCACC TCAGCCTGGC AAAGTCTGG	180
GATTACAGGT GTGGGCCATC ACGCCTGGCC TTACAGTAA TTCTTGATAA ACAACCCAGC	240
AACACACCTC GAG	253

## (2) INFORMATION FOR SEQ ID NO:128:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:128:

GAATTCGGCC TTCATGGCCT AGGACGGGGG ACTCAGGTTT TACACTGGAA CCTGGGGTCA	60
TGTATCATGT ACCAGGTGGG GAGAAGTGT GCAAATCTCA GTGCCAATT GAGGGGAAGC	120
CAGTCATTCC AGGAGAAGAG CTGAGGGGAA AGAGCTGTTG ACTTTCATAA TGCAGTCTTA	180
ATTATCCAGT CACCCTCCTG CCACATGGCA GAAGCCAGGT GGCAGTGATG GTGGTGGGGG	240
AAACAAAACA CACAGTCTCT GGCAAGCCCC ACCGGGAAAG GAGGGCTCAG AAGGCGTAGC	300
GGGTCCGGAT ATCCTCGAG	319

## (2) INFORMATION FOR SEQ ID NO:129:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:

GAATTCGGCC TTCATGGCCT ACAATAAAG CCCATAGGGA AGAGAGAGAG GATATAGGGA	60
AACAGAATCA GATGTGTAAT ATAATTGGCA CAGCGAAAAA ATGGATTAA AAGACAAAAA	120
TGGAGGTCCA GGTAGATGTA ATTCACACAG ACTGAAAGTG AGTTCGGGCT TGTGTAAAC	180

ACATGAGATT GGATTTGACC CCTTGGCTCT CAAGTGTCCT CTTAGATCTA GAACTGCTCC	240
TTGGTGGCCA TTAGATCGAG TCAGTTTGA TCTGCATCAC TTAGTTATTG GGAATTTCTT	300
TGTTGGAAAC AGGAAAATTT TTTTAGATTA TTTGGCGTAC GGCTCGAG	348

## (2) INFORMATION FOR SEQ ID NO:130:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:

GAATTCGGCC TTCATGGCCT AGGCACAGTG AAACCCGTGG AAATTCAAAG GTGAGCAGGA	60
CAGTGGGTCC TGTATCTTGA TCTTTACGGA TCTTTCTCTT CTTGAATCCT CACAGCACCC	120
ATTTTATAGA CAGGAAGACT GAGGCCCGAA AGTTCTGTCT GACTCTGAGC CTGGCCTCTT	180
TGCTGCCTCC CGTTGTCCTG TGAGGCTGTG TGGTCACAGC ACCCAGGACT TGAGAGGAGT	240
GAAGTTCTTC CTCACCCCGC AAAGGCTTCA TGAGCCCTAC TGTGTGCCAG GCCAGCCCTG	300
CTCAGTCTGG GGCATAAAC ACAGGGCAGA TTCTGAAAGC CTGTGTGAGG GAAGTTCTAG	360
GCCTGCAGGA GCTGAGAGGA GACCCTGGAG AGGAAGGGAG TCAGGGCCAG CTTCTCGAG	420

## (2) INFORMATION FOR SEQ ID NO:131:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:

GAATTCGGCC TTCATGCCTA AGCTGATGGA GACTGTAAAT GAACCAGAAA CAGGTGAAGT	60
GAGCAAAGAT GCAGTCATTG TAAAGCAGGA GAAAAATAAT GAATATTGCC TTCAGGATAT	120
TGATGATAAA TTGTCAGAAAT CAGCAGAGGA TGATGGTGAA GATGATACCA ATGATGAAGA	180
TGATGATGAA GATAGTAACC CTAAAAAGAA TACTCAGGCC CCACTAGAGT TAATGCCAGA	240
ATTTCTGAGA GCAGAAATGG CCCGAGAGTA CCAGCTGGCA AAAAAATTAT GTCAGATGAT	300
CCTAATCTAT GAACCAGAAA ATCCTGAGGC CAAGGAGTTT TTCACACTTA TTGAAGAAAT	360
GTTGCTGATG GAGAAAATC AGAATCATGA GCAAGACGGT GAAAACAGTG ATGAAGACAG	420
CAGCGGGCTC GAG	433

## (2) INFORMATION FOR SEQ ID NO:132:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:132:

GAATTCGGCC TTCATGGTCT ACAAATCAA CTGCAAGCAG CCATCATCAG TTTGGAAGAA	60
GCTTTGGGAA GCCTTCAAAG AAAACCTCG GTATCCACCA AGTCAGGCTC AAGCAGCTCT	120

TCAAGACAGT	CCCCCTGAAG	AGTACTCCTA	TAAGAAATCA	ATAAGAAACC	TGTTTAAAAA	180
CATTCCTTTT	GTCCTTCTGT	TGATCACTTA	TGGTATCATG	ACTGGTGCCT	TTTATTCACT	240
CTCAACGTTA	TTAAATCAAA	TGATATTGAC	ACAACTCGAG			280

## (2) INFORMATION FOR SEQ ID NO:133:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

GAATTCGGCC	TTCATGGCCT	ACGCGAGCGG	CAGGTGTGCA	CAGGAGGTTT	TCCACTTTGT	60
NCTCTGAAGT	CGCGGTCAGG	ATGGTTTTCT	CTGTCAGGCA	GTGTGGCCAT	GTTGGCAGAA	120
CTGAAGAAGT	TTTACTGACG	TTCAAGATAT	TCCTTGTCAT	CATTTGTCTT	CATGTCGTTT	180
TGGTAACATC	CCTGGAAGAA	GATACTGATA	ATTCCAGTTT	GTCAACACCA	CCTGCTAAAT	240
TATCTGTTGT	CAGTTTTGCC	CCCTCCTCCA	ATGGTACTCC	AGAGGTTGAA	ACAACAAGCC	300
TCAATGATGT	TACTTTAAGC	TTACTCCCTT	CAAACGAAAC	AGAAAAAACT	AAAATCACTA	360
TAGTAAAAAC	CTTCAATGCA	TCAGGCGTCA	ATCTCGAG			398

## (2) INFORMATION FOR SEQ ID NO:134:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

GAATTCGGCC	TTCATGGCCT	AGGGCGATGG	TGGGCAGAGG	ATCCTTAGTG	CTCAGTCGGG	60
CTCCACCAGA	ACCACGGACT	TGAAGGAGAA	GAGACTCTCG	GTTCCAGGTA	GCAGAAAACG	120
TGGAGTTTGT	GACACAGATC	CTCCTGGCCA	GAGAAGGATG	CTTGAGAATC	TGAGATTTAC	180
ACAGCTGTAT	TAGTTTGTCC	ACGATGACCG	GGCAGTAGGT	CTCTCTCTTG	GGGATTTCCT	240
CAGTGGTCTG	CCAGAGACGG	GCGTGAGAGA	TCACATTTCAG	AACGCACTCG	TCTTGGTTCT	300
CTATGTGGTT	CCTTGGATCA	TCAACAAGGC	TAAGCACTTT	CTCGGAAGG	CCTTCTATTA	360
ACTTGGTCTT	GGTGAGCCAG	AGGGCCTGCT	TTACACCCCTC	GAG		403

## (2) INFORMATION FOR SEQ ID NO:135:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:

GAATTCGGCC	TTCATGGCCT	ACTCCATTTT	TCGAATGGCT	TATTTAGGCC	CAGCTCTTGC	60
GTTTGCAATTG	TCCCTTCAGG	CCCAGAACTT	TCTCACGTCA	TCGTCAACAG	GCCTAGCTTC	120
TGCATCTGGT	CAGCCTTTTA	AGGCCAGCT	TTTGCCTCAT	AAACTCAGCT	CCTGTTTAAAT	180

GGCGGCCTCC CGGGTCCCAC TCGAG

205

## (2) INFORMATION FOR SEQ ID NO:136:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:

GAATTCGGCC AAAGAGGCCT AGTTTTATTA CTTTGGTTAA GACATCAGTT ATTTTAGTCT 60  
TTGATAATTC ATTATCTAGA TAATGGTTAC TTTGTATTGT CTGTTTCTCG AG 112

## (2) INFORMATION FOR SEQ ID NO:137:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:137:

GAATTCGGCC AAAGAGGCCT ACACAGAGCC CTTCACTACT TTAAATTCTT CTAAATTGG 60  
TGGTTCATGT TAATTAAATT ATTATTATTT TTTTGTGAGA CGGAACCTCGA G 111

## (2) INFORMATION FOR SEQ ID NO:138:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:

GAATTCGGCC AAAGAGGCCT AAAGATGTTT TCCATGAGGA TCGTCTGCCT GGTCTAAGT 60  
GTGGTGGGCA CAGCATGGAC TGCAGATAGT GGTGAAGGTG ACTTTCTAGC TGAAGGAGGA 120  
GGCGTGCGTG GCCCAAGGGT TGTGGAAAGA CATCAATCTG CCTGCAAAGA TTCAGACTGG 180  
CCCTTCTGCT CTGATGAAGA CTGGAACTAC AAATGCCCTT CTGGCTGCAG GATGAAAGGG 240  
TTGATTGATG AAGTCAATCA AGATTTTACA AACAGAATAA ATAAGCTCAA AAATCTACTA 300  
TTTGAATATC AGAAGAATCT CGAG 324

## (2) INFORMATION FOR SEQ ID NO:139:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:

GAATTCGGCC AAAGAGGCCT AGGTCCAGAA ACATTTAAAA AAAAAAAAAA GGGGGCTTGA	60
GAAAAGGGCT TCCAGTGCCA GGCAGAAATA TGTTTTTCTT AATAGGGC	108

(2) INFORMATION FOR SEQ ID NO:140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:

GAATTCGGCC AAAGAGGCCT ATGAAAACGT GGATTGCTT TGTAACCTG AGAATACATT	60
TTGTTGCCAA CAAAAGAGA GAAGAGAAGA GGAAGATATT GAAGAGAAGA AATCGATTAA	120
GAAAAAATT AAAGAACTTA AGTTTTTAGA TTCTAAAATT GCCCAGAACC TTTGTAAGTA	180
TCATATTCCA ATACCATTCA AAGACAGTGG AAATATTCTT TTAAATGATT TCATTTTCTT	240
TAAGACCGAT TATTCATTAT TTGCTATTTT CATTTTGTTA TTATATGCAT GATAAATTCA	300
CAGATACTCT CGAG	314

(2) INFORMATION FOR SEQ ID NO:141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:141:

GAATTCGGCC AAAGAGGCCT AGGGTAAGAC TAGAGTGTTT TAAATCATCA ATAAAAAGTG	60
GAGAAAACAA AGGTATTCA GCGATTGAAT TCTAGACCTG CCTCGAGCCC TGCCTTTCCT	120
TTACTTTTAC TTTTTTTTTT TTTTCTTTG GAAGAGAGAA GAACAGAGTG TTCGATTNTG	180
CCCTATTTAT GTTTNTANTC GGGAACAAAC GTTGGTTGTG TGTGTGTGTG TTTTCTTGTG	240
TTGGTTTTTT AAAGAAATGG GNAGAAGAAA AAAAAAATTC TCCGCCCTT TCCTCGATCT	300
CGCTCCCCC TTCGGTTCTT TCGACCGGTC CCCCCTCAAC CTGCCTCGAG	350

(2) INFORMATION FOR SEQ ID NO:142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 167 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:

GAATTCGGCC AAAGAGGCCT AGAGAGTCTG GATGACAAGC AAAGCTCAAT CTCAAAACAA	60
---	----

TAATTTTAA AGTAATGATT ATCTTAACCA TTCTTAAATC CTTCTGTCTA GTAGGAATCT 120  
TATTCATGGG AGTGTCTGGA AAAGGGACAA AGAGCGGCTA TCTCGAG 167

## (2) INFORMATION FOR SEQ ID NO:143:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:

GAATTCGGCC AAAGAGGCCT AGTGTTCAC AAAAGAATTG GAAACCATAG TCCTGAACTC 60  
TCCCTAAGTA GTATAAGCTT TAAATAGCAC TCAATCCATA TTAAGTCTTC TTAGTGTAGC 120  
ATGGTTGCTC TCATGCGTCT TTCTTATGTT TTAAATGGTG TAAATTTTAG TCGTTTGTCA 180  
TTCAGAAAGTG GCTTTGCAA TACAAATAT CTCGAG 216

## (2) INFORMATION FOR SEQ ID NO:144:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:144:

TAATCTTTAC TGGTGAAAAG GATGGAAAAA TAAATCAACA AATGCAACCA GTTGTGAGA 60  
AAAAAAAAAA AAAAAAANC CGAAAAAAA AAAAAAACA CCTGAATGCG GAAGAGCTCG 120  
GCTCCCGTTT AGCATTTTGT ACTTAAGGAA ATAAAAAACC AACAAAGGAT CTCACATTTT 180  
CTTAAAAAGT GAAGATTGCT GTATACTATT TATTCAACTT ATAATTTATG TTTACTCCTTG 240  
ATCTTTGTCT TTTGTCTATGA CAAAGCATT ATTTAATAAA GTTATGCATT CAGTTCTCGA 300  
G 301

## (2) INFORMATION FOR SEQ ID NO:145:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 177 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:

GAATTCGGCC AAAGAGGCCT AGTCTCTGTT AATCCTACTC TGCTTTAGCC AGAATAGCCT 60  
AGTATTTTAT TTCTATTTTA TATATTGAGA TTTCTTCTAA CATTCCTTT GATAAAATC 120  
TTCTGCTTTT TGAAAAGTGG TATGTATCAT ATTTTATGT TTCTGGTGTG TCTCGAG 177

## (2) INFORMATION FOR SEQ ID NO:146:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:

```
GAATTCGGCC AAAGAGNCGT AGGGAAAGAT TTCAGCTATT AATCAACTGG AGGAAATTCA    60
AAGCCAGCTG GCTTCTCGGG AAATGGATGT CACAAAGGTG TGTGGAGAAA TGCGCTATCA    120
GCTGAATAAA ACCAACATGG AGAAGGATGA GGCAGAAAAG GAGCACAGAG AGTTCAGAGC    180
AAAACTAAC AGGGATNTTG AAATTAAAGA TCAGGAAATA GAGAAATTGA GAATAGAACT    240
GGATGAAAGC AAACAACACT TGAACAGGA GCAGCAGAAG GCANCCCTGG CCAGAGAGGA    300
GATTCTCGAG                                     310
```

(2) INFORMATION FOR SEQ ID NO:147:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 353 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:

```
GGTGGCCTTG GGTCAGATT CGCACCATGG TGGGCACAAA CCCAGGAGAA CACTTTCCTG    60
TAAACGTGTT TTCATGCTGG AGCCAAGGTT TTGACTTGGG TTTGGATTTT TATTATTATTA    120
TTTATTATTA TTATTACCAG GTTGCACTTA AAGGATGTTT TGGAGGAGCA CAGAGTTTGT    180
CTGGTGAGGG TAGGCTCTGG GCAGATTTT CTGTGAGTCT CCCCTGCCTG CGGCATCAGG    240
ATCATCCCTG GTGCCCTGTG GTGGCACCAG GTGGCTGCCC ACCCACAGGC GTGGCCTTCA    300
CAGTGGGGGC CATCTCAGCC TGGGGTAGCG ATCTGCCTCC GACCTGCCTC GAG          353
```

(2) INFORMATION FOR SEQ ID NO:148:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 283 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:148:

```
GGCCTGCATC GCAACAGCCA GGAGGGCCAG GCCACCCAG GCAGGAGGCA GTGGGCTGGC    60
AGCCACCCCTG GGCACAGAAG AGCAGACGCA GACAGTGCTG GGCAACGAGG GGCTTTCTTC    120
ATGGGCCCCG CTGCCCTGTC CCTCCCCCA GGTCCCCACC TTCTAGGGTT AAAGTGCAGC    180
TGGGAGGGAG GAGGCAGGCA GAATTGGGGA GCTAGAGAGA GCCCAAGTGA ACCCTGACTG    240
TCCACGCAAG TCCCATGTCC TCCTCGTCCT GGAGTTCCTC GAG          283
```

(2) INFORMATION FOR SEQ ID NO:149:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 321 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:149:

```

GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAGTTCCTT TTGTTATTTT CCTGCATCTT      60
ACAACGTTAA GGCCTTGGTC CCTGCTAATA ATAAAATAAT AATCAACTTT ATAAAGAGCT      120
TACAATATGC CAGATACTGT ACTAAGTGCT TTATATTTTT TTTTGGGTG GGGGGTGGCT      180
GTTGGGCAGT GTCTCGCTCT GTCACCCAGG CTGGAGGGCA GTGGCACAGT CATGGCTCAC      240
TGCGGCCTTG ACCTCCTGGG CTCAGGCCTC CCGCCTCAGC CTCCCAGGTG GCTGGGGCTA      300
CGGGCGTGCA ACATTCTCGA G                                     321

```

(2) INFORMATION FOR SEQ ID NO:150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:150:

```

GAATTCGGCC TTCATGGCCT ACGTAATTCT GGAAAAGTGA ATACTTGTGA AGAGTCGTCT      60
TGAATGATTT GTAAAAAATC CTGTTCTTAT ATTCAACGAG TTTGGAATCT TTGTCAGAGG      120
AGTATTACCA TTAGATTGAA AAAAAGGAAA ATAAATAATA AACACTTTTA AAAAACTCC      180
CCATTCTCTT ATTCTCACTT TTAGGAAAAG AGACTGACTA ATATCTTCTG CCACAAATAC      240
CGATGTTCTT AAAAATATTT ATGGGACTGC TTTTGGCAAC CAGCCCTATT TTGTTTTCAT      300
ATCCCTTTTT GTCCCATCT TTCCAAACTC ATAAACTCGA G                                     341

```

(2) INFORMATION FOR SEQ ID NO:151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:151:

```

GAATTCGGCC TTCATGGCCT ACTCGCCTCT ACTAAAAATA CAAAAATTAG CCAGGCACGC      60
GCCAGGTGGT GCGCACCTGT AATCCCAGCT ACTAGGGAGA CTGAGGCGGG AGAATTGCTT      120
GAACCTGAGA GGTAGAGGTT GCACATAGCG CCACTGCGCT CCAGCCTGGG CAACAAGAGT      180
GAGACTCTGT CTCAAAAAAA TATATAAATA AATAAATGAA AAAAAATAAT TGTATAACAT      240
CTATACTATA GCCTCGTAAG CATTAGCTAC TTAATATTTT TGGTATATTT AATAATTTTA      300
ATACAGCATT TTTGATTACT AGTGAACATG AATATTTTCC CATATTTGTT AATTATACTT      360
TCCTCTTACA GAAATTCTGT TTGTGTCCTT CACCCTTCAC TCGAG                                     405

```

(2) INFORMATION FOR SEQ ID NO:152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:

GAATTCGGCC TTCAGGGCTC CTTCTTCCTA GGCTAGTATT TATCCCACTA CATCTGACTC	60
ATTCTCTACT ATCGCTGTTG ATTTCTCTTT GGGTACTAAA TCTGTTGAAC ATGTTGCCAG	120
GCTTACTGCT GGTATTATGG GATAGCATTT GCCTGATGGC AGCTTCTAAA GGAGACTCCG	180
ATGGCACTAA GCAGTTTCCA AAAGTTTATC TTGCAAGTTC AACCCAATTG GAG	233

## (2) INFORMATION FOR SEQ ID NO:153:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

GAATTCTAGA CTTGCTCTGA GATGTTTTTT TCGTTATTTG AAATCTTTGC TCTTTTATTT	60
TTCAGCTCCC AGATCCTCTC CCTCTCTTTA GCTTTCAGTG TGTTTGATAT CAAGAATATG	120
AAATGTGAAT TCCACGGACT CGAG	144

## (2) INFORMATION FOR SEQ ID NO:154:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

GAATTCGGCC TTCATGGCCT AGGCAGGAAG GAGGCTGGAA TAAATAAAAA TAAAAATAGA	60
CAAGTAAGAC AGCATAAATA ATACATTTTT AAACATGTCA ACATTGATAA TACAATGAAG	120
ATTTACCATA AAAAGTATCA TATCTAACCA AGATATGCAA AAGATGCATT CAGTAAGCTG	180
TAACGTTGAG AAATGTAAGT GTGAAATCAG CTCACCAAGT CAAGTCACTA GGTTTGCCAC	240
TTGGACCGTC TTGGTTTCAG CGAGCATAGC GAGTGGCTGT AAGAAATTGT CCATGCCACC	300
AATTCCACTG CTACTTGCCC AGGTGGTCTC GAG	333

## (2) INFORMATION FOR SEQ ID NO:155:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:155:

GAATTCGGCC TTCATGGCCT AGGAAGTGGA GGAAGCTGG GTCGCTGCTG GAAGGGAGGG	60
AGGCTGACTC TCTACCCCTC ACCTCTGCAA GGAAGTGGG CCTGTAGGGT TGCGGCTGTC	120
ACTGGCTACA GCGGCGATCT TTCTGTAAAA AGCTTTTCAG GCATGAAACC CATTTCTGTA	180
TGGACTGGGC TGTGTTGACG GTGGTGCTTG GGCCTTGTGT GCCAGGCCTC TCTGGGTCCC	240

CTCCCTGGCC TTTGCCTTCC TCTCACCTTC TCGAG

275

## (2) INFORMATION FOR SEQ ID NO:156:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:156:

GAATTCGGCC TTCATGGCCT AGAGTCATAG GTCAGACCAC TTTCTAGGAG CTGTTTCAGTG	60
ATAAAATTAA TAACAGTGAC TTTTGAGTCA AAATAGATT TAAAGTACT TGATTTTCTC	120
TTTGATTGG AAACATCTTT GTTTAGCTTA ATTGAAATGA TCTAAATAT TTGAAGGATT	180
TTATACTTTA CACAGAGGCA TGTATTGGA TAATTAGCTT TTATTAAACC CAGGCTTCCT	240
CGAG	244

## (2) INFORMATION FOR SEQ ID NO:157:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:157:

GCGATTGAAT TCTAGACCTG CCTGAACCCC ACCCTTCACG TCCTACTTGG GCTGCCAAAG	60
TCATCTTCCC AAAACATGAC TTTTCCTCAG TCACTTTCT TATTAGATT TATCATATT	120
CACATCCCTT CCCTGGCCCT CAAGGGTGCC TGTAACCTAG AACCATCTTA CCTTCCACC	180
CTTGTTTCCA AACCTTCCGC TTTACTTAGA CATGCCTTCC CATTTCCCTC CCGACCCACC	240
CCCCTCGAG	249

## (2) INFORMATION FOR SEQ ID NO:158:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:158:

GAATTCGGCC TTCATGGCCT AGAAAAAAC AAGTAGTTTG GCAAGGAGAG CAGAAAAATA	60
AAATTCCACT GTGTAGGCAT TTGGAGATTT AGCAAGAGCA ACCTAGAGTC TGCCCCCAGA	120
GACACTGCAC GTTGTTTCTG ACACAGAGGA TGCACTAATT CTATTTCTTG TGCCACCTGA	180
AAAAATCATA ATTTGAGAAG AGAACTGTT AGGCCATTTC TAGTGAAC TA TTTTCCAAA	240
CCCTCACGGA ACCCTGAACA GGGCGTGTCT CGAG	274

## (2) INFORMATION FOR SEQ ID NO:159:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 298 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

```
GAATTCGGCC TTCATGGCCT AAGCTTGCTC ACTCTTCTGT GTGTTTGAAA TAATGGTAAA      60
ATACAATAAT ATTGTCAAGC ACAGTGGATC GGAGATTTTT CTCTCAGGA CTATTCTGCT      120
TATAGGTCTA CTTCTATAG CTATTGTCA TTGTCCTCCT GGTCTCTCTC TTTTCTTCTC      180
TCCTGTGCTA GATGCTCTCT CTTCTATCC CTCCTCTCT TCCCACCCCC ACCTCCCACT      240
TCTCTGTTA TATCCTGATT TTGGTGGAAC ACATCCTCCA GGCTCCCTGG CACTCGAG      298
```

(2) INFORMATION FOR SEQ ID NO:160:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 239 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:160:

```
ATGGCCTAAG GTGCCCNAGC TTGCCAATTA ATTCCCAGTA GAAATTTTAA AATGTTAAAG      60
ACAGTAATTA AAAAAAAAAA AAAACCACAC TGTTTGGACA TTTTACCTCG TGCTTTGTGT      120
GTGACTAGAT TATGCACTAG AATTTTATTC AGTATTCTTC CAAATAAGTT ATTTCCCAGG      180
TGTTGCGTGG TATCTAACCA ANTANTCAAT AAAGTATTCT TGCTAAGTNG GCCATGAAG      239
```

(2) INFORMATION FOR SEQ ID NO:161:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 353 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:161:

```
GAATTCGGCC TTCATGGCCT AATATCATGA TCACTGAAAT TACATCTAGT GAAACACACA      60
CGTGCTTATC TGCACGTGTG TGTAAGTTAG AAAGAAAAAA CAAAGGCCTA ACAGTGATTG      120
TCTTAGGTTG ATAGGATAGT GGGTGGGATT TGCAGAATTT TTGTATCTGC AGAATTTTGT      180
CAAAGTGCCC ATTAGTTTTG TAAAGAAAAA AACCTAAATG TATAACTTCT AAAGAGATAA      240
TTTTTCTTT CATGTTTTTG CTACCTATAT CTAGGAAAAT AACTTAGAAT TGTAAATTATT      300
TTGAAGCTCT GGAATTATTA TGTTCAAAAA TTACAGAACC AAAAAGTCTC GAG      353
```

(2) INFORMATION FOR SEQ ID NO:162:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 469 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:162:

```

GAATTCGGCC TTCATGGCCT ACTTGCTGTG GCTGACTCGG TTATTGACTT TACTTCTTTT      60
CTTTTCAGGT TTTTATGGGA CTGTTTCTAG CCCTGATTCA GGTGTGTATG AAATGAAGAT      120
TGGCTCCATC ATCTTCCAGG TGGCTTCTGG AGATATCACG AAAGAAGAGG CAGATGTGAT      180
TGTA AATTCA ACATCAAACT CATTCAATCT CAAAGCAGGG GTCTCCAAAG CAATTTTAGA      240
ATGTGCTGGA CAAAATGTAG AAAGGGAATG TTCTCAGCAA GCTCAGCAGC GCAAAAATGA      300
TTATATAATC ACCGGAGGTG GATTTTGTAG GTGCAAGAAT ATCATTATG TAATTGGTGG      360
AAATGATGTC AAGAGTTCAG TTTCTCTGT TTTGCAGGAG TGTGAAAAAA AAAATTACTC      420
ATCCATTGTC CTCCAGCCA TTGGGACAGG AAATGCCAAA CAACTCGAG      469

```

(2) INFORMATION FOR SEQ ID NO:163:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:163:

```

GATTTATTCA TTCTTGATTA AATGCACTGA AAAGTAAAGG GTCTGTTTGT GTCATGTTCA      60
TGAAAATGCG GTTAGAGAGG TGCTATTCAA GTGATTCTGA AGGCACCCCA AGGTATATCT      120
GTAATTTAAA GATTACTGCA AATATCTTGA CTTTACTGTG GGTTTTTAGT ACATCTGTTA      180
ATTTAGTGTT TCTTTGTGTG TTTTGTAGAC TAGTGTCTT CCATCCTTCA ACTGAGCTCG      240
AG      242

```

(2) INFORMATION FOR SEQ ID NO:164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:164:

```

GAATTCGGCC TTCATGGCCT AGCATTTTTT TTCTTTAAAT TATTGTATCC ACTAGTTCTT      60
GCCAGTATAA AGGAATACAA TTGACTTTTG TGTGTTTCAT ACGCTACAAC CTTTCTAAAT      120
TCACTTATCA GGTCCAGAAC TCTTCTACTA ACAATGCACT TTTATAAAGC CCTAACACCT      180
CTCCTGATCT CTGTCTCACC CTCCACCTA TCTCACTGTG GGATGGGAAG GAAGTCAATG      240
GAAACACAG GAGCGCATT TAATAATAGC CCACATGGTA TACTCGAG      288

```

(2) INFORMATION FOR SEQ ID NO:165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 199 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:165:

```

GAATTCGGCC TTCATGGCCT AGCTCGATCC AAGAAGAAAA ATTAAAATGA CAGCTTTTCC      60
CATTGATATA ATCATCTTAC TTTGCTCTCT ACAAGAAATA TGCATTAGGA ACCTTCATTA      120
TAGGTCCACA GAAATAGCAG AACACAAAAG CGCCCCCCTA CCCCCCGCC CCGGTAACCA      180
GAAATACACA GAGGCAGAG                                     199

```

## (2) INFORMATION FOR SEQ ID NO:166:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:166:

```

GAATTCGGCC TCATGGCCTA GAATTAACCA ATTAAGAATT AATAAATTAC TTATAAAATT      60
AAAAATCAGG AATACCAGGC TTAATGCATT CATTATTCTT ATTAGCAAA CTTTTTTTTT      120
TTTTTTGAAT GCCACAATG TCCTAGGTTT TGGAAATACA AAATTACTTG GTACCAGTAA      180
CTCGACTGTC ACCTTTCCAG CCATGGACTT GGTTCAGACA AACCCCCAGT CCACGGTTGT      240
CGTCCACTTG CAGTGCCCGC CGACTGTGGA TATATGCTGG GGATCCCAAC ACAACGCAGC      300
TACTCTCGAG                                     310

```

## (2) INFORMATION FOR SEQ ID NO:167:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 187 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:167:

```

GAATTCGGCC TTCATGGCCT AGTAAATATT TTCTTCTACT TTGTGTTTTG CCTTTTTGTT      60
TTCTCAGCAT TATTTTTTGA AGACAAAAG ATTGATTTTG AAGAAGTCTA ATTTATCAGG      120
TTTTTTCTAG TAGTTTGTAG CGGATTNTG CATGCTGCTT TAAAAAAAT CTTTGCTAAC      180
CCTCGAG                                     187

```

## (2) INFORMATION FOR SEQ ID NO:168:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:168:

```

GAATTCTAGA CCTGCCTCGA GCCTTGCCCA GAATCAGCAA GTAAACTGCA CTAATTTGTC      60
TTATATTTGA CTTTCTAACA CTGATTTTTC TGATTTTTC CTGTTTCGACC CTCCAATTTA      120
TAAAAATGTG TATAATTGTT CTGCTGCTTC TGCTTTTGCC TGCTTTGGCT GCTGCATATA      180

```

CAGGTGAAGA TCTGGAAAGA AATGATGGAT CTACAGAAAA ACCCTACTTC GTAACCCCTA 240  
ACCTGCATGG AATTCTGATC AAGAAGCAAC TCGAG 275

## (2) INFORMATION FOR SEQ ID NO:169:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:169:

GAATTCGGCC TTCATGGCCT AGTTTCACAT TGTCTGTACT GTGTTGTGCA GTACCAGAAG 60  
TTGCTGGTAG CTACTTGGTC TTCTGGGACC TGCCATTGCA GACGTGGTGA TTGTAATCTT 120  
AATCTTGTG AAACAGGATG GATTATGAC TGGGATGGCC GGAAGCCACA CCAGACACCC 180  
AGTCACCTGG TCATGGGAGA GGTACTTTGT TGGCTTTTCA TAGTACTTAA CACTGTGAGC 240  
TGCTTCCTGA AGTGGCACTC TTAAGGCCAG GTGCCCCCAC CCTCGAG 287

## (2) INFORMATION FOR SEQ ID NO:170:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:170:

GAATTCGGCC TTCATGGCCT AAGACAGACA TTTTGGCAG AGCATAGATG AAAATGGCAA 60  
GTTCCCTGGC TTTCTTCTG CTCAACTTC ATGTCTCCCT CCTCTGGTC CAGCTGCTCA 120  
CTCCTTGCTC AGCTCAGTTT TCTGTGCTTG GACCCTCTGG GCCATCCTG GCCATGGTGG 180  
GTGAAGACGC TGATCTGCCC TGTCACCTGT TCCCGACCAT GAGTGCAGAG ACCATGGAGC 240  
TGAAGTGGGT AAGTTCCAGC CTAAGGCAGG TGGTGAATGT GTATGCAGAT GGAAAGGAAG 300  
TGAAGACCT CGAG 314

## (2) INFORMATION FOR SEQ ID NO:171:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 195 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:171:

GAATTCGCCT TCATGGCCTA CACCAAGTTG AATCCCTATG CAGGAGGAGA CGGCCTTCAG 60  
AACAACTGT CCCCCAAGAC AAAGGGCACT CCTGTGCACC TGGGCACCAT CGTGGGCATC 120  
GTGCTGGCAG TCCTCCTCGT GCGGCCATC ATCCTGGCTG GAATTACAT CAATGGCCAC 180  
CCCACATCCC TCGAG 195

## (2) INFORMATION FOR SEQ ID NO:172:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 238 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:172:

```
GAATTCGGCC TTCATGGCCT ACACTCCTGG TCATTTTGCA TTTTATCCAG CTTTTTTTCA      60
TCAACCATGT TATCCTGACA GACACATTTA TTGGATATTT AGTTGGAAAT ACCTTATGGT      120
TGGTTGCAGT TGGCTATTAT ATCTATGTAA CTTTCCTGGG ATACAGTGCA TGGCCATTTT      180
TGAAAAATAC AGTAATTCTT CTGTATCCAT TTGCACCTCT GATTCTGCTC AACTCGAG      238
```

(2) INFORMATION FOR SEQ ID NO:173:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 234 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:173:

```
GAATTCGGCC TTCATGGCCT AGGCTAACGT AATTGAGAAA ACCAAATGAA ATATATCTTG      60
ACCAATAATT TAAAACCATA TCAGAGATTC AGTTTGGTTC TGTCTTCTGC TTTACTGATT      120
TTAGGATCAG CCTCATACAA AAGGGTAATG GTGGCAGCAG CTCCAGAACT CATATCATAT      180
CCTCCCATGT TAAAGTCAAA TGAGAAAAGT CTGTCTTCGC CCCAGGATCT CGAG      234
```

(2) INFORMATION FOR SEQ ID NO:174:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 251 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:174:

```
GAATTCGGCC TTCATGGCCT ACTCAGTTCC ATTGTTAAGC AAGGAAAAAC AAACAATACA      60
TTGAATTTGA CAACCCACTG AAGTTGCAGA TAATGAGGAC TTACCATTGT ATACCATTAT      120
TCATCTGGAC CTATATGTTT CATACAGTTG ACACCATCCT ATTACAAGAA AAACCTAACA      180
GTTATTTATC AAGCAAAAAG ATAGTGGGTC TGACAAAAGA TGACGGTAAA ATGCTACGTC      240
ACACCCTCGA G      251
```

(2) INFORMATION FOR SEQ ID NO:175:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 239 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:175:

```

GAATTCGGCC TTCATGGCCT AAACCACTGC GCACCATATT TCTTAAGGAT GTTCTGAAGA      60
CCCATGAATG TCTGSTCAAG TCTGCTGATC TCTTAATGAG GGACAACCTG TTTGAAATAA      120
TAACAAGCTC CAGGACATTC TACGTACAGG CAGACAGTCC AGAAGACATG CACAGCTGGA      180
TTAAGGAGAT TGGCGCAGCT GTCCAGGCCC TCAAGTGCCA CTAGGCCATG AAGGCCGAA      239

```

## (2) INFORMATION FOR SEQ ID NO:176:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:176:

```

GAAAACCCCA GATATTCCTT ATTATGGAAG AAGAAGCAGG AAATATGTTT TTGAATAATG      60
TGGGTCAGAG AATTGTGCAT TTATTATTGC TAGGATGCAT ATACACATTG AACTCAGTCA      120
ACTTACTCTC TCTAAATTAT CTCACCGGTG GAGACATTGC CTCAGGAGTC GAGCCCTGTG      180
GTGTGCCTCC TGCTGTCACC ACATTTGACC ACCTAACTGA CCCCCTGTG GTCACCTTTG      240
CCACCAATCT CGAG                                     254

```

## (2) INFORMATION FOR SEQ ID NO:177:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:177:

```

GAATTCGGCC TTGCCAGTAT TCATGCTGTT GCTTCAGTCA AGAATGAATT CCTCAGCGCT      60
ACCTCTCTTG ACCTTCACAT CTTACTTAGT GCAAATGCTG TCTCCTCCTG AGACTTGCCT      120
GACTTCGGAT ACTCTCCCTG TGACATCTTA TCTAAAATGT CAAGTGAGAC TCGAG          175

```

## (2) INFORMATION FOR SEQ ID NO:178:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:178:

```

GAATTCGGCC TTCATGGCCT AAGTGGCTGT GTGGTATTTT CTAAGTATTT TTAAATTTT      60
TCTCTCATTG ATACCCTATA AAAATGCAAC TGTTAAAGAA TTTGTCTTTC TTTCTCATT      120
TATTCTTTCC AGAGTATATA ACTAATTTAT TCAGCATTCA TTCATTGAGC AGATATTTGT      180
TGAGCACTAA CTATGTTTCTG GCACTGGGCA GGGATATCGG GATACCAAGA AAGCTCGAG      239

```

## (2) INFORMATION FOR SEQ ID NO:179:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 236 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:179:

```

GAATTCGGCC TTCATGGCCT AGAAAATAAT TTAGAGAAAG AATAGAAAGT CATGGAAAAT      60
CTCATAGGTA GGAGACAGAA GAGAGAACAT TGTAATAAG TTTAAAAAAG ATAAGAAAAT      120
CAGGATAAAG TAGTATGGAC TCTGAGGTGG GAGAGAATTT TAAGATTAGC AGGAAAGTAG      180
TGTAGTTGGT ACTTTTGTAGT TATTAACAAA GCACTCACTT CTTACAGAGT CTCGAG      236

```

## (2) INFORMATION FOR SEQ ID NO:180:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:180:

```

GAATTCGGCC TTCATGGCCT ACGAAGATTA TAATGTATTT TTATTCTGTT TTCAGCTTCA      60
TGTTTCCTGT TGCAGGTGGG ATAAGACCCC CTCAAGGCCT GATGCCGATG CAGCAACAAG      120
GATTTCTTAT GGTCTCTGTC ATGCAGCCTA ATATGCAAGG CATTATGGGA ATGAATTACA      180
GCTCTCAGAT GTCCAAGGA CCTATTGCTA TGCAGGCAGG AATACCAATG GGACCAATGC      240
CAGCAGCGGG AATGCCTTAC CTAGGACAAG CACCCTTCCT GGGCATGCGT CCTCCAGGCC      300
CACAGTACAC TCCAGACATG CAGAAGCAGT TTGCCGAAGA GCAGCAGAAA CGATTTGAAC      360
AGCAGCAAAA ACTCTTAGAA GAAGAAAGAA AAAGACGCCA GTATCTCGAG      410

```

## (2) INFORMATION FOR SEQ ID NO:181:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:181:

```

GAATTCGGCC TTCATGGCCT ACACATTTGC ATTGTCTGCC CATGGACTGG TTGGAGCAGA      60
AACCTCCATA CCTCAGTCTC TTGGTATTTG TCTGCCCCAA CTGCTGCTTT TTGTTGGGAT      120
GTTTGTGTGT GCTGGGGTCT CGGCAGCATC GGCTGCTTCC CGGTGCGCAC TGACATGCAC      180
TTGTTCTCCA CGATGGCTTT CTCTACCTTC TGAGATGCTC CATTATCAGT CTTGCCCTTG      240
TTCCGGAGAG TTGAGATGGT ATCACTTCTC ATCCATCCTT AGAAATACCC CTCTCGAG      298

```

## (2) INFORMATION FOR SEQ ID NO:182:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:182:

GAATTCGGCC	TTCATGGCCT	AGGGGGCTGG	TAGTGAAATA	TTTGGTACTG	AAAGTGTGAA	60
GACCTCTGCT	GGGGACTGAA	CAGAGGGAGT	GTCTTCTGCT	GGTGGTGTGA	AATCTATCTC	120
ATCATCAAAA	TTATCTTCAA	ATTCCTTAAA	GTCTATTCT	GGGTCCTTAC	AGCAGGATAC	180
ACAGTTTGCA	ATTAACACTA	TTAATATTAT	TAAACTGCAC	ACACACAGGA	TCACAAAAGA	240
TCAGGAAACT	TCTGCAGCAG	GTGGCGCTCG	AG			272

(2) INFORMATION FOR SEQ ID NO:183:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 250 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:183:

GAATTCGGCC	TTCATGGCCT	ACTACTTATC	ATCCCTGCTC	ACACACCCTT	GTCCAAGGCT	60
TTATGCATCG	GATTATTTT	TCCAAATCAA	GAGGACAGTG	ATAGATGCAT	TTTCCCCAGG	120
CTGTCTCAGA	AAGGTCGCTA	AATGTATACT	GTTGTGAGAA	TTGCTGAGAT	CTCCCCCAC	180
TTTTGGTTTT	TGCAGCAGTA	AAACTCTTT	CCACTGTGAC	TTATTTTCTC	TCTCAGGCAG	240
CAGACTCGAG						250

(2) INFORMATION FOR SEQ ID NO:184:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 399 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:184:

GAATTCGGCC	TTCATGGCCT	AGATCTTCTC	CCCATTCAGC	AAACTTTTCC	CATTCCGGTT	60
AATGGTTTTG	ACAAGCAGGG	CACCACGGGG	CATAAAATTG	TATCATCCAG	CCTCCTTCCA	120
GCAGCTCTCT	CCAGTTCTTG	TCTGTGATGA	TGCGTACGTT	GCTCTGCCGC	CTGTGGGTCC	180
AGGGAGCACC	CCCAAGCAAC	AGTACCAGGA	CTGCCAGCGG	AACTGCAAGA	CTCCTGGAGG	240
GTGCCATGTC	TGCCACTTGC	CCACCTCACA	GCAAGCGTGG	CGGCCCAACA	CTAGGTTTTT	300
TAAAAACTGT	GACTATCAGT	GTTTAAAAA	TTGCCCGGTA	ACTCTAGACT	TCAAAAGTGG	360
GATAAGTAAT	GATAAACCAA	TAATAAACCC	TGCCTCGAG			399

(2) INFORMATION FOR SEQ ID NO:185:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 185 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:185:

```
GAATTCGGCC AAAGAGGCCT AAAAATTAAT ATTACCTTAT GACTGCCTTT ATCATGACTC      60
TCTTAGTGGG GATTTCTGTC CTCCACATGC CCTGGGGGAT GTGCAGCCCC CGTGCACTCC      120
CCGCCTTGGC CGGCCCTTC CCCCATGCCC AGGTAGACTC TGAGCTCTTA GCCCAGCAAC      180
TCGAG                                     185
```

(2) INFORMATION FOR SEQ ID NO:186:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:186:

```
GAATTCGGCC AAAGAGGCCT AGGGAACATA TCTTAAACAC TGAACCTCTT TTCAGCAAAT      60
TGGCTTTCTA GTTCTCAGC TCTCTCTTA CACCTCTAAA TCTCTTTCCT GGCAAGATCA      120
TTTATTGGCC TTGGTTTATG GTGATACTCT TCATTGTTAT ACTGGTGGGT GATTGTTTTA      180
ATTCATAGCT GTTTTTTCT ACTTCAGGAA GATGACACTG CTGGCTCTGC TGGCTCTGAT      240
GTTTACCTTG TGGCTAATGC CTGTGTTTGC CTGTGTTTAC ATTTATTCCA CGATTCAATT      300
GTAAACATTT ACTAAGCTCG AG                                     322
```

(2) INFORMATION FOR SEQ ID NO:187:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:187:

```
GAATTCGGCC AAAGAGGCCT ACTCATAACA GCGTCAGAGA GAAAGAACTG ACTGAAACGT      60
TTGAGATGAA GAAAGTTCTC CTCCTGATCA CAGCCATCTT GGCAGTGGCT GTTGGTTTTCC      120
CAGTCTCTCA AGACCAGGAA CGAGAAAAAA GAAGTATCAG TGACAGCGAT GAATTAGCTT      180
CAGGGTTTTT TGTGTTCCCT TACCCATATC CATTCGCCC ACTTCCACCA ATTCCATTTT      240
CAAGATTTCC ATGGTTTAGA CGTAATTTTC CTATTCCAAT ACCTGAATCT GCCCCTA'AA      300
CTCCCCACCT CGAG                                     314
```

(2) INFORMATION FOR SEQ ID NO:188:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:188:

GAATTCGGCC	AAAGAGGCCT	ATTATGCTGG	TGCTGTCTAC	TAATTTCAAG	AAAACTACA	60
AGTCTGGCTA	GACTCTGCTA	CCGCCTAGCA	CTGAGGTGTG	GTCCTTTATC	TGTTATTACA	120
TTCTTCGTGA	TAATGAAATT	CTGAAACACA	TGCTCCAGGC	ACCTTTGTAA	ATGTGAAGGT	180
GAATAAAGTA	TTTGTGTTGT	GTCTGAAAAG	AGATCTTTGA	AATGTAAAGT	TGCCACAGAC	240
CCAGACCAAG	GAGCCTGCTG	AGAGTTTTAA	AGGCTCTTAT	TGGATGACAG	TAGATTCTTT	300
CCTTGAAATG	TCTATAATGA	ATATTCAAGA	ATGCTCATTG	TGCATGAAAT	TTGCAATTTT	360
AATTATCAGT	GAAAGAAAAG	ATTACACAGT	GCTAAATGAT	TGCCATGGAA	AAGTTATGGC	420
TACCTCTTGG	AGTAGAGAAA	ATCTCAAAGG	CCGCTACTCG	AG		462

## (2) INFORMATION FOR SEQ ID NO:189:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:189:

GAATTCGGCC	AAAGAGGCCT	AGTGGGCAAC	TTGGAGAAGA	GTGAAAAACA	CTAAAGAATC	60
ATCTCTTTTC	CGAGTCACAA	AGTCCCATGA	ACTTTGTGAC	TCAGAGACAC	TTTTCGTGAA	120
AATTACCTTT	CGGCGGGACA	CCGTCTCAGG	GCAGCTTTTT	CAAGGCTTCG	CTTGACATGA	180
TTTCCTTCCC	TTCATCAGTC	ACTTTGGATC	CAGCTGAATA	TCTCTCTCGG	GTGAGAGCGG	240
ATGTGGACTG	GCCTCCACAC	GAAGAAGAGT	AGGTGGCTTT	GGTGGGGGTT	GGGGTGCGGG	300
CTGGCTTCCT	GGTCTCGAG					319

## (2) INFORMATION FOR SEQ ID NO:190:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:190:

GAATTCGGCC	AAAGAGGCCT	AGTGAAAAGA	AAGAGACTGT	NAAATAATTC	TGCATATCCT	60
CAGTGGATAA	TTCTGTNACC	TATCTGTCAG	CTATTCCATA	TCAATAAAGG	ACACAGCTGG	120
TAATCCAAA	GGAAAGGATC	TCTTGATGAA	AGTGTTCCTG	CATTCTTATT	AAAGTCAACA	180
TACAAGATAC	ACTCTTAGTG	ATTTTGAAC	CCATAATTAT	ATTTGTCTGA	TAATAATTGG	240
CACTTAACGG	TTACAGAACA	CTTTCACTGA	TATTTTCCTT	AGTGAATCTT	AACAACAATT	300
CTACCAGTAA	TTTCTAATAT	TTGCCATGAT	TAGACTTTCA	AAATTAGTCC	ACGCACTCGA	360
G						361

## (2) INFORMATION FOR SEQ ID NO:191:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:

```

GAATTCGGCC AAAGAGGCCT AAGAAACATG GCGGCCGCGA CGTTGACTTC GAAATTGTAC      60
TCCCTGCTGT TCCGCAGGAC CTCCACCTTC GCCCTCACCA TCATCGTGGG CGTCATGTTC      120
TTCGAGCGCG CCTTCGATCA AGGCGCGGAC GCTATCTACG ACCACATCAA CGAGGGGAAG      180
CTGTGGAAAC ACATCAAGCA CAAGTATGAG AACAAGTAGT TCCTTGGAGG CCCCCATCCA      240
GGCCAGAAGG ACCAGGTCCA CCCAGCAGCT GTTTGCCCAG AGCTGGAGCC TCAGCTTGAA      300
GATGATGCTC AAGGTACTCT TCATGGACCA CCATTCGCTG TTGGCAAGAA ACGGCTTTAC      360
TTACAAAACA GTCTCGAG                                     378

```

## (2) INFORMATION FOR SEQ ID NO:192:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 175 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:

```

GAATTCGGCC AAAGAGGCCT ACTCTGAATT AATGCAAATT CCCGTTGTAC TGTATTTAAT      60
TATGCACAAA ATGGTGCCCT TGAATCAGAT TTCAGTGAAG AACTTCATTT TTTTACTTTT      120
AAGTCTCCAA GTAGGAAATT CAATTAGCGT TATGAAAGAA AACTAAAAC TCGAG          175

```

## (2) INFORMATION FOR SEQ ID NO:193:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 700 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

```

GAATTCGGCC AAAGAGGCCT AGGCAGCAAT GTTATCTGTC CTTCAATCTT GCATGTTTTT      60
GGAAATTGCT TTTGCTTTTA CTTTGGTTCG TCATGGCAAT CACGTGCCTT CTCTGGTTCA      120
TTTTGCACAG ACCTGCCTAG AGCTGGAACG TTACCTCCAG AGCGAGCCCT GCTATGTTTC      180
AGCCTCAGAA ATCAAATTTG ACAGCCAGGA AGATCTGTGG ACCAAAATCA TTCTGGCTCG      240
GGAGAAAAAG GAGGAATCCG AACTGAAGAT ATCTTCCAGT CCTCCAGAGG AACTCTCAT      300
CAGCCCGAGC TTTTGTTACA ACTTAGAGAC CAACAGCCTG AACTCAGATG TCAGCAGCGA      360
ATCCTCTGAC AGCTCCGAGG AACTTTCTCC CACGGCCAAG TTTACCTCCG ACCCCATTGG      420
CGAAGTTTGT GTCAGCTCGG GAAAATTGAG CTCCTCTGTC ACCTCCACGC CTCCATCTTC      480
TCCGGAAGTG AGCAGGGAAC CTTCTCAACT GTGGGGTTGC GTGCCCGGGG AGCTGCCTTC      540
GCCAGGGAAG GTGCGCAGCG GGAATTCCGG GAAGCCAGGT GACAAGGGAA ATGGCGATGC      600
CTCCCCCGAC GGCAGGAGGA GGTGACCCG GTGCCACTTT AACGGCTGCA GGAAAGTTTA      660
CACCAAAAGC TCCCACTTGA AAGCACACCA ACGGCTCGAG                                     700

```

## (2) INFORMATION FOR SEQ ID NO:194:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 453 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:

GAATTCGGCC	AAAGAGGCCT	AGAAAAATAC	TTGGGCAGAA	AGAAAATATC	ATCAAATAAC	60
ACCTATTTCT	TTTCAGCTAT	AGAGATGGCT	GGATATCAAA	AGCACACCGG	GAGCTTTGCA	120
ATTTGCTGCC	TCTTTTCAGC	CCTCAGCTTG	ACTCTCAGTT	TTCAAGAGGG	AGAAAATGAA	180
TGTTTCCCAG	CATTCTCTGT	CCTTTGCTCC	AAAGAAGAGA	GCAGGTGTTG	GCTTCCAAAC	240
CTTCCGTATT	TTCTTATTGC	TGTTAGGGGG	ATCAACTGCA	TGTTTCCTGA	GGGAAAAGGG	300
TGGCTCACTG	ACCTACTTGA	AGGCATTCTC	TCAGTGGAAAG	CTGGGCAAGA	GAATCCAGGG	360
ATTTCTTTTG	CAGGTTTCTG	CGCAGTGCCC	CTGCCATCAA	GCTGCCTAAA	ATGTGAATAT	420
TGCTTCCCTG	CGTTTCAGAG	GTGGCCGCTC	GAG			453

## (2) INFORMATION FOR SEQ ID NO:195:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:

GAATTCGGCC	AAAGAGGCCT	ACAAAATGTG	AATGGAACAA	ACCTGCACGT	GTACCCCTTGG	60
ATGTGTGGAT	GTTCTTTGTT	TTTATTTGTT	AAACCTGATG	TCTTGTCTGT	ATGACACATT	120
TATTGGAAAC	GTTTTTTCCC	TATTCTGTGT	CTTGATTTT	ATTTTCTCGT	GTTCTCCAAA	180
GAGCAGATAT	TTTAAATTTT	TATATAAATC	CAGTTTGTCA	ACATTTTTAA	AGGGTTCATG	240
CTTTTTGTAT	CCTATTTTCAG	AAAACTTTGG	CTACTTCAAG	GTCACAAAGA	TTTGGATT	300
GTTTTAATCT	ACAAGTTTTA	TAGCTTTGAC	TTTTATATAT	AAGTCTGATT	CATTGGAGT	360
TAATTTTGT	GTACAGTGTC	AATTAAGGGT	CTAGGTTTCAT	TTATTTTCTT	ATGAATATCC	420
AATGGTTCCT	CGAG					434

## (2) INFORMATION FOR SEQ ID NO:196:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:196:

GAATTCGGCC	AAAGAGGCCT	ACAAACACAG	AACATTTCCA	TCGTTGCAGA	GAGTACTATT	60
AGAGAGCAGT	ATTCCAGAGC	CTGTGATCTT	AATCACTACA	CCTAAAGCCT	CCCAGTTGAC	120
AAAGTTACCA	CCTTTTTTTG	GTGTGTGTGC	ACGTGCGTGT	GTGTGTGTGT	AAGTATATAT	180
AATTTAAATC	ATTCCATTAA	ATTTACCTCT	GAAATTCAAA	AGACTGAAAC	AGATCTTCTT	240
TTTATCAAAT	AAGTTGATTG	CAGAGATTAT	ATTGGTGT	ACATTTTCAGG	CAACCTGCTC	300
ATGAAATTAT	CCATTGCTCT	CGAG				324

## (2) INFORMATION FOR SEQ ID NO:197:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:197:

GAATTCGGCC AAAGAGGCCT ACTCCTCCGC CTGCAACCAT TGTTCCTAC CACTGGATTA	60
TTCTGAAGCA AATTTTAGAC ATCATATATA TTTATCTCTG AAAGAGGACT CTTAAAAACA	120
TGCACTTATA CCTCTATTAC ACTGACAAAA TTGGTAACAA TTCCTTTATA TTATCAAATT	180
TCCTTATTGA GTTCCTGATG TTCAAATTC TGATTCTCCA GATGCTCCAA ACTTCCAGAA	240
ACACAGATTC CCAGATGGAA TCCTGGGGAA GGCTCGAG	278

## (2) INFORMATION FOR SEQ ID NO:198:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:198:

GAATTCGGCC AAAGAGGCCT ATTTTCTAAT AAAAATATT TTATGGTAGG TTTTGTGGAT	60
TATTGAATAC AATCTGGCAT TCTGTTTAAT ATGTATGTTT TCCTGAATGA GGGGGTACAT	120
TGTAATTTTA ATTATTAAAC TCACAATGTT TTTGGTTTTA AAAATAAAAA TTTTAGGAGC	180
AAGCAGTGTT CCTGCCTTCT TTTCTGAAGA TGATTCTCAA TCGAATGACT CAAGTGATTC	240
TGATAGCAGT AGTAGTCAGA GTGACGACAT AGAACAGGAG ACCTTTATGC TTGATGAGCC	300
ATTAGAAAGA ACCACAAATA GCTCCCATGC CAATGGTGCT GCCCAAGCTC CCCGTTCAAT	360
GCAGTGGGCT GTCCGCAACA CCCAGCATCA GCGAGCAGCC AGTACAGCCC CTTCCAGTAC	420
ATCTACACCA GCAGCACTCC ACCTCGAG	448

## (2) INFORMATION FOR SEQ ID NO:199:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 187 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:

GAATTCGGCC AAAGAGGCCT AACTTTTGTA ATTTGAATTG GGTCCCGCTT AGTTCCTGAA	60
TTGTTATGAA AATCCTATAT CTGTTTGAT ATTTGCAAAC CCTTTGTATT ATAATTGTTG	120
ATATTTTCCC TTTTAAAAA ATACCATTGA AATCAGCATG ACAAAAATAA CACTGTGGGC	180
ACTCGAG	177

## (2) INFORMATION FOR SEQ ID NO:200:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:200:



```

GAATTCGGCC AAAGAGGCCT AGACCAGAAT AAGCCTTTTA AGGTAAACCT CAAAATTATC      60
ATTTTATGGT AATACTGACC ATTTTAGTCC CCTAGGTTTG ACATGGGAGA TAGTGACTAC      120
ACTGGTGTCT GACTTTTTTC CTAGAGATT CTCCCTGAAA AATACAAGGG CTGTTGGTGA      180
GAGCAGACTT GAGGTGATGA TAGTTGGCCT CTGGTCTACA AAGATTTTCAT AACTCCTTGG      240
AAAGCTTCTT ATAATCATTC TTAAGTTCTT GGTAGCTAGA AATTAGAGT AGTTGAAATC      300
TTTAGGAATG AACTTCTGAG GGCCAAAAAA TGTGACTGAC AACTCGAG      349

```

## (2) INFORMATION FOR SEQ ID NO:201:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:

```

GAATTCGGCC TTCATGGCCT ACATCACCAA TTCGGCTGGG TAAGGGTCCC CATGAAGGCG      60
CAGCCGGGTA TAGAGGTGCA GGGGAGAGCA GCCTGGGGAG TCCCTATCTG GATAGGCTCC      120
AGCCTGGGTC GGGGCGGTCC TGGTGCCCGG TGAAGCGTCA AAAGAGGGAG CCTGAGCGGG      180
GCAACGCAGA AGGGTGGAGA GGAGGGGGTG GCGAGGGCGG GCAGCGAGGC CTGGAGCCGC      240
CAGGAGAGGG GCGGGGGGCG GCCCTTCTCC AGGAATTTC GGGGATCGTG TTACAGCGTT      300
GGCGGAGCCC GAGCGGAGTG GGACTCGAG      329

```

## (2) INFORMATION FOR SEQ ID NO:202:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:

```

GAATTCGGCC TTCATGGCCT AGAAAGGGGA GGAACGTGA CAGGCAGGTG TGGGATAGGG      60
ACTTCTCTTC CGGTCAGAGC AAGGGTCGTC CGAAACCAAA ACAACCCTCT TCCCTTCATC      120
TCGCCCCGGA TCCAAAGTCT TGGGGCTAGG CTGGGGCGGG AGTGGCACGG AGATGTAGGA      180
AACTGCCTT TCGTTACTTC TCCTGCCATG GCTGACCTTT TTGTCTCTTG TTTTCATGGT      240
TTACACGTAT GAATGGCTTG AGACTGAGGA TTAGGGAAG AAGCGAAGGC ATCATCTAGG      300
GCTGTGCTGT GCCAAGTTGA GCAGTTGTTT AAAGTTTAG AATTTTGTGAC TGGTGTAAAA      360
ACCCTCTATG CTCGAG      376

```

## (2) INFORMATION FOR SEQ ID NO:203:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:

```

GAATTCGGCC TTCAAGGCCT ACGTGAAACC CCATCGGCTT CATTGGCTCC TTGATTTAAA      60

```

CCACGCCCCG	CTNTCTGCCC	TCTTTGATGC	TGCTGGGCCA	GGTTGCCCAG	CCATATCCCA	120
GGCCCGTCTG	CAGGGAGCCG	GAGGCNGCTG	CTGCTGCTAT	TGTGTGGATG	CCGCGCGTGT	180
CTTCTCTTCT	TTCCAGAGAT	GGCTAACAGG	GGCCCCGAGCT	ATGGCTTAAG	CCGAGAGGTG	240
CAGGAGAAGA	TCGAGCAGAA	GATCTCGAG				269

## (2) INFORMATION FOR SEQ ID NO:204:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 197 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:

GAATTCGGCC	TTCATGGCCT	AGATGTGTTG	AACCTTATTC	TTGTACATTC	ATTCAATCAA	60
GGCAAACCTT	TATAATTTTT	CTTTTGTTC	CAATGACCTT	GAAATGTTAT	AGCATGGTAA	120
TATTCTATGC	AACTATAGTT	ATACTTTTTG	GTTTGACACT	GTATTTTTTC	ACATTGATT	180
ACTGGTTGAG	GCTCGAG					197

## (2) INFORMATION FOR SEQ ID NO:205:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:205:

GAATTCGGCC	TTCATGGCCT	AGCAAGACCT	TTTAAGTATA	TACTCTGAAA	GTGTGGCTAA	60
TATGATCATG	ATGCTGTAGG	AAAAAAAGGT	TATATGTCCA	AGTGTATGTA	CTTGTAATG	120
TGCCTAAAGA	AACCTGGAAG	GATACACAGG	TCTTCCCTGG	GGTACAAGAC	GGAGAACTGG	180
GATCATCATC	TTAACTCTAC	TCTTCCTTTT	TACTCTTCTG	TCCTCTTAGA	GACTTTTGCC	240
TGTATACATG	GATTACTGTT	ACTTAGCAGG	GGCGACCGGT	TGGCCAAAGC	CTTGGTGTGC	300
CCTTGGCACA	ATTCTGCCAA	GACCCTTACC	CTCTCCTCTC	CTCANGGCTC	CCTTAACCCC	360
TCTCCCCACA	TCTGGAAAAC	CCTGGATACA	TTTTCT			396

## (2) INFORMATION FOR SEQ ID NO:206:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:

GAATTCGGCC	TTCATGGCCT	AGGAAGAGGT	TGAGAAGACT	CCTGGGCTTC	AGCCTCTCCC	60
ACCCAGCCCT	GCCCCCACC	TGCCTGCCCT	CCCCCCCCC	ACTCTATACT	AGGGACTGGA	120
TCTCAGCCTC	TGATCAGTTT	CACAAAGTTT	GTTCCCTAAG	GAAATCAAAT	CCCATTTGCA	180
CCTAACTCTG	AAGATCTAAA	TAGCCCTTGG	ATCAGTACGG	GAACCCCAA	TCCCACAGGG	240
CCAGATGTGG	AGTCTGTGTC	TGCCCCGTC	TTCTCTCCAT	CCTCAAAGCC	CCCACTTCTC	300

TCCAGGCTGC TTCTCGAG

318

## (2) INFORMATION FOR SEQ ID NO:207:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

GAATTCTAGA	TCCTGCCCTC	GGAACAATGG	GACTCGGCGC	GCGAGGTGCT	TGGGCCGCGC	60
TGCTCCTGGG	GACGCTGCAG	GTGCTAGCGC	TGCTGGGGGC	CGCCCATGAA	AGCGCAGCCA	120
TGGCGGCATC	TGCAACATA	GAGAATTCTG	GGCTTCCACA	CAACTCCAGT	GCTAACTCAA	180
CAGAGACTCT	CCAACATGTG	CCTTCTGACC	ATACAAATGA	AACTTCCAAC	AGTACTGTGA	240
AACCACCAAC	TTCAGTTGCC	TCAGACTCCA	GTAATACAAC	GGTCACCACC	CTCGAG	296

## (2) INFORMATION FOR SEQ ID NO:208:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:208:

GAATTGCGCC	TTCATGGCCT	AGTCTCTTGA	AAAGCCGCAT	TTCCAGGCGC	TTGGCCAGTG	60
GCCTGGGAAG	TAGCCTGTGC	TTGTATTGAG	ACAGTCCCCC	AGCAGCAAAC	CATGTTCCAG	120
TCATTCCCTT	TCCTACTTTG	GGGATTGTTG	CCTTTCTGCG	TTGTTTAAAG	TAAAACAAGC	180
ATGTACTTGT	TTGTATGTAT	GTATGTATGT	AGTTGTACGG	TGGGCACAAA	TAAAAAGAGG	240
GCTGTATCCA	AATAATCAT	TTCTGGCTGC	TCAGTGGCAC	AGTCCCTTTG	CTCCGTCCCC	300
TCCTGGCTCG	AG					312

## (2) INFORMATION FOR SEQ ID NO:209:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:209:

GAATTCGGCC	TTCATGGCCT	AGGCAGCGTT	TCACCGCTGT	GGAGGACCAG	TATTACTGCG	60
TGGATTGCTA	CAAGAACTTT	GTGGCCAAGA	AGTGTGCTGG	ATGCAAGAAC	CCCATCACTG	120
GGAAAAGGAC	TGTGTCAAGA	GTGAGCCACC	CAGTCTCTAA	AGCTAGGAAG	CCCCCAGTGT	180
GCCACGGGAA	ACGCTTGCCT	CTCACCCCTGT	TTCCCAGCGC	CAACCTCCGG	GGCAGGCATC	240
CGGGTGGAGA	GAGGACTTGT	CCCTCGTGGG	TGGTGGTTCT	TTATAGAAAA	AATCGAAGCT	300
TAGCAGCTCC	TCGAG					315

## (2) INFORMATION FOR SEQ ID NO:210:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 518 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:210:

```

GAATTCGGCC AAAGAGGCCT AGGAAGATGG CGAAGGTCTC AGAGCTTTAC GATGTCACTT      60
GGGAAGAAAT GAGAGATAAA ATGAGAAAAT GGAGAGAAGA AACTCAAGA AATAGTGAGC      120
AAATTGTGGA AGTTGGAGAA GAATTAATTA ATGAATATGC TTCTAAGCTG GGAGATGATA      180
TTTGGATCAT ATATGAACAG GTGATGATTG CAGCACTAGA CTATGGTCGG GATGACTTGG      240
CATTGTTTTG TCTTCAAGAG CTGAGAAGAC AGTTCCCTGG CAGTCACAGA GTCAAGCGAT      300
TAACAGGCAT GAGATTTGAA GCCATGGAAA GATATGATGA TGCTATACAG CTATATGATA      360
GGATTTTACA AGAAGATCCA ACTAACACTG CTGCAAGAAA GCGTAAGATT GCCATTCGAA      420
AAGCCCAGGG GAAAAATGTG GAGGCCATTG GGGAGCTGAA TGAGTATCTG GAACAATTTG      480
TTGGAGACCA AGAAGCCTGG CATGAACCTG CACTCGAG                                518

```

## (2) INFORMATION FOR SEQ ID NO:211:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:211:

```

GAATTCGGCC AAAGAGGCCT AATTGAATTT CATTTCCTTT GTAGACTAAT GTTACAATAA      60
ATAAATGGGA ATTTTAAATA CCTGCATGTT CTGTTTTTCT CTTTTTCTT TTTCAGCCA      120
TAATGAAAGG AAAGTGACCT GCAACATCC AGTCACAGGA CAACCATCAC AGGACAATTG      180
TATTTTGTGA GTGAATGAAC AGACTGTTGC AACCATGACA TCTGAAGAAA AGAAGGAACG      240
GCCAATAAGT ATGATAAATG AAGCTTCTAA CTATAACGTG ACTTCAGATT ATGCAGTGCA      300
TCCAATGAGC CCTGTAGGCA GAACTTCACG AGCTTCAAAA AAAGTTCATA ATTTTGAAAA      360
GAGGTCAAAT TCAATTAAAA GGAATCCTAA TGCACCGGGC GATCTCGAG                                409

```

## (2) INFORMATION FOR SEQ ID NO:212:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:212:

```

GAATTCGGCC AAAGAGGCCT AGTACAGTCC CAATCAAGAA GCCTTATTAA CTTTCTGTGT      60
GAGGGACTAG ACTCAGTGTT GGGTTTGGAG GATCCACTGG TGAGGAGCAT TCAGTCTAGC      120
AGGAGAAATG TCAGCATTAT TTATTACACA ACAAGATCTG ATGCATTGAG ATGTACTTAC      180
AGGTCTAGGA ACTGTTTCTG GGAGCACAAA TGAATGAGAG AGAGAGGGAG AGAGGGAGAT      240
TGAGTGAGTT AGAGAGTTGT TGGTGCTCCA CAAGGAGCAG TAAAGTATTT TAAAAATAAA      300
AAATAATAAG GCTGACTCTG TGTCCTGCCT AGGGGTTGGC CATGCTCCAC AAAAAGCAGT      360
AAAGTGTTTT TTGTTTTGTT TCGTTTTTTT TTAAAGACA GACGTCTCGA G                                411

```

## (2) INFORMATION FOR SEQ ID NO:213:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:213:

```

GAATTCNGCC AAAGAGGCCT AGTTTATCT TCTTACCTAT TTACTGAATG CNACATTACT      60
GCACACCAAG ACAAAGAGC TCTCCAGGAA AACATTGGAT ATATTGAGAG CATTAAAAGA      120
TACTGCAAAA GCTCTAATAA ATTCAGTCTG CTTATTTTCC AAATTCATA AACTACATAC      180
TTAGGAAACT GTGCTTTCAG TGAGCTAAAC TTCTTTT TTTT AAGTAACTAT CATAGTTTAA      240
AGAAAAACAT TTTAAGAAGA CAAAAAGTAT TTATTAAGCC CATCTAAAAG GCTAATGCAA      300
ATTCCCAAAA AAGGAGCACA TAGAGATAGG CATCTCGAG                               339

```

## (2) INFORMATION FOR SEQ ID NO:214:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:214:

```

GAATTCGGCC AAAGAGGCCT ATTGAATTCT AGACCTGCCT CGAGACACTA GCCCTTTTTT      60
CTGTTGGTTT AGCACAATAA CTTCCCTCCT CCGGCACCTC CAAACCTACC CCACAGTCAG      120
TGTACTTGTT TTATATATAT TTAATCTTAT TCAATGGAAA CCATGCTTTT GTCGTTTTAT      180
ACTTTGCTAG GTAGACTTCT CGAG                                         204

```

## (2) INFORMATION FOR SEQ ID NO:215:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:215:

```

CTCGAGAGGC GCATCTTCAC TGGCATATGA CAGGCTGTCA CTGCAGCTAA TGTTGGTACA      60
GTTTTTCCAA AGACCTACTG ATGCATCTAC CGTATTGGAA ACCAACCAGA CATTGGCAAT      120
GGTGCTAACA AATAGCATAA TAACAGTAGC GATGTGGACC ACAAAGATAC CAGCCAGCAA      180
TACCAACATG TTGGCTCTTT TTTT TTTT TTTT AACTTGTGAG CAAAGAGAGT TCTGAAGGGT      240
CCCAGCGACA GAGGCACTCG AGGCAGGTCT AGAATTCAAT TAGGCCTCTT TGGCCGAATT      300
C                                                                    301

```

## (2) INFORMATION FOR SEQ ID NO:216:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:216:

```
GAATTCGGCC AAAGAGGCCT AAAATATTG AGTCTAACT TATAAATTT GCATTCTCCC      60
TAACGAAAAA ATTTCTATTA CTGTGGTGA TTTCTTAAA TTTTGAATAT AGTTACTGAA      120
ATATTAATTC TTTCAATTAA ATTTATATT ACTCACTGGT TCCTTCCCCT TCTTTAAGGA      180
GACAGAAAAC ATTAACACTT TTTAACCTCT CATTTGTTA AAAATTATT GACCTCTCCT      240
CTGAGACAGT TTGTATTCCT AGATCTCTTT AAACATAAAT ATGCTTATTT TCAAGTTTTT      300
GTCACAGTAT TCACTCGAG                                     319
```

(2) INFORMATION FOR SEQ ID NO:217:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 278 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:217:

```
GAATTCGGCC AANGAGGCCT ATTTAGATT AACCCAGTT GTAGACATT GCATAGATCA      60
AGCAAACTA GAAGAGTTT AAGAGAAAGC ATCAGAACTT TACAAGAAAT TTGAAAAAGA      120
GTTTACCGAC CACCAAGAAA CTCAGGCTGA ATTGCAGAAA AAAGAGGCAA AGATTAATGA      180
GCTTCAAGCA GAGCTACAAG CTTTAAAGTC TCAGTTTGGT GCCTTGCCAG CTGATTGTAA      240
TATTCCTTTG CCTCCCTCTA AAGAAGGTGG AACTCGAG                                     278
```

(2) INFORMATION FOR SEQ ID NO:218:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 298 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:218:

```
GAATTCGGCC AAAGAGGCCT ACCTGGCTCA TTTATAACCT CCTCGATCCT ATTACTGATT      60
TGCATTCTTA ACTACAGGTA AGAGAAAACC AGTGCAACCT AGCTTTCAT AGACAGGAAT      120
TTGCTGGCTC ATATAAATGA GACATCCAAT AAAGAAGAAA AGTTGGAAAA AATGTGTCAA      180
ATGTAGCATC CTCTCTCTCT CTTTCTCTCT CTCTCTGTT TTTACCTAG GCTTGTGCCA      240
TAAACCTGCT TCTACATCAG TTAGTGTGGT TATGGGCGTC TTGTTGGCTG AGCTCGAG      298
```

(2) INFORMATION FOR SEQ ID NO:219:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 251 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:219:

GAATTCGGCC AAAGAGGCCT ACTTAGCAGA ATATATTCTT TAATAGCTCC CATAAAGCAA	60
ACAAACCCAA AATATATTCT CCTGACCCTA CATTCACTTC CAACTATCAC CCTACATCTA	120
CATTCTCCTT TTCATACCAA ACTTTTTCCT AGCAGTTGTC TATATTTATG TCTCCACTTC	180
TTTACCTCCT ATTCTTGCTT CAGTATGCTT CAGTTGAGCT TCGTCCCCCT GTAGTCCACC	240
ACCAACTCGA G	251

(2) INFORMATION FOR SEQ ID NO:220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:220:

GAATTCGGCC AAAGAGGCCT AGATTGATTC TGTGTTGTGG TATTGGCCCT TACATACAAC	60
TGGAGGAAGT GTGAATTTCA TCATGTTGAT AAATTGGACT GTCATGATTC TTTATAATTA	120
CTTCAATGCC ATGTTTGTCT GTCCGGGCTT TGTCCCTCTG GGGTGGAAAC CGATGTGTGA	180
TGAAGATGGA CCATCACTGT CCTTGGATCA ACAACTGTTG TGGTTACCAA AATCATGCTT	240
CGTTCACACT GTTCTCCTT TTAGCACCAC TGGGTTGTAT CCATGCTGCT TTCATTTTGT	300
TGATGACTAT GTACACACAG CTTTATCATC GGCTCTCCTT TGGGTGGAAC ACAGTGAAGA	360
TCGACATGAG TGCAGCACCC TCGAG	385

(2) INFORMATION FOR SEQ ID NO:221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:221:

GAATTCGGCC AAAGAGGCNT ACCCNGATTA TAGTTTTTGT ATTGTTTTTA CAATTTTTGT	60
GAATTAGGAT CCAAATAAGG TCTGTAAATA TTACATTGGG TTTAGGTAAT CGATACTTTT	120
TTTCTTTTAA TCTATAAGTT TTCCTCTATC TTTTATTGT GGTATTCCC ATACAATTGG	180
TTTGTTGAAG AAGCCAGGTC TTTGCCCTAT AATACTTCTC AGAATCTAGA TTGTGTTGAT	240
GAGATCCCAG TGGTTTCATG TAATATGTTT TTTGTCCCT TGTATTTTCT GTAAATTTTG	300
TTTATTTTAT TTTTTTTATT TCTATTATTT GAGATGGAGT CTTGCACTGT CACCCAGGCT	360
AGAGTACAGT GGCATGATCT CAACTACCG CAACCTCGAG	400

(2) INFORMATION FOR SEQ ID NO:222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:222:

GAATTCGGCC	AAAGAGGCCT	AAGAGCCTAT	AAGGTTTACA	TATTTCACTG	GAGAGAGAAA	60
TAGGGACATA	CAATAAATGA	TTTTATAATA	AATTTCCATG	AAAAGTGAAT	CTGAAAACCC	120
CACCGGAAGG	CAGAGTAGTG	CAGCCAAAGG	AGCATGAATT	GTGGAATCAT	ACAGCTCTAG	180
GTTCAGATCC	TACCTTTACC	ACTTGATAGC	TAGGCAGACT	TCAACAAGTT	AGTCTAATTT	240
GAGCTTCAGT	TCTCTCATCT	GTGAAAAAGA	GAAAATACAG	CCACTTTATA	ACATTATTTT	300
AGATGCCATA	AGGTAGGTAA	AGTGCCAGAC	ACATAGATTG	AAAAATCTCA	ATAAAATAGG	360
AAGGCTGGAA	TTTCCAAAAT	TTTTTCTTGC	TTTCACAATC	TGGGTTCTAA	ATTTATTATT	420
ACTCTACCCA	TCATTTCCTC	CTTCTCCCTC	CACAACCTCA	CTATAAGCCC	AACATCTCGA	480
G						481

## (2) INFORMATION FOR SEQ ID NO:223:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:223:

GAATTCGGCC	AAAGAGGCCT	AGTGTCTATG	AGAGGTCTCA	GCATTTCTCT	TAGTATTTGA	60
CTGTATTAGT	TTTACATATT	TCTTCTTTTG	TTTAGAGTAT	AACCGCTTCT	TACATTTTCT	120
TCAGTCGTTT	TCTAAAGAAG	AAATTAATCT	TTTTAGAAAT	CCTGGCAGTT	ACCCCGCAAT	180
TGATGTTTTG	GTGGAATAAT	AGAGCACACC	AGTTTGTCTA	AACTTTAAGA	AACATTTTCA	240
CTTTATTGAT	ATTCTGAGGA	TTTGTAGTAT	TTGGGTAATT	TGGGTCTAAT	AAAGAGTAAA	300
TTGTTGAATA	CTCATTTGTT	TTGAGTCATC	TATATTTTTA	AACCCTTTCT	TTAGTTGTTT	360
TTTCATCCCT	AATACAAATG	CAACTTTCCC	ACTTGCTCGA	G		401

## (2) INFORMATION FOR SEQ ID NO:224:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:224:

GAATTCGGCC	AAAGAGGCCT	AAACTGATGT	CTTCCATTTG	CTGGATAGGA	CATGCTGACT	60
GATGACCTCA	CAGACTGTTT	TTATGCCCTC	ACTACTCACC	TCACCACCTA	CAGTCATAGG	120
CTGACTAGGA	GTTGGTTGTG	TACATTCCTA	AACCTTTTTG	CCCTCTTTAT	TTGTCTTTCT	180
AAGTGTGTAT	TCAGTACTAT	GTAAATTGAT	AAAACATGAG	TGTGAAAATA	TTTTTTTTTG	240
CTATAAAAAT	GTAAATTGAA	TTCTTTGGGG	AAGAGCTGAT	AAAATATGTC	ACTTAAAGAT	300
CTTGTTAAAT	TAGATGAGGG	AGATATAGAT	GACAGAAACT	CTTTCAACAA	ATATCTAAAA	360
AGATGTGCCA	CTCCAATTAT	TTTGTGAGTG	TCTTCAAGTT	TATGTCCCAC	TTTAAAGAAA	420
ACCAAACTGG	CCATCATAGC	CAATGAATTA	TGCAGGAGTC	TCGAG		465

## (2) INFORMATION FOR SEQ ID NO:225:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double



(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:225:

GAATTCGGCC	AAAGAGGCCT	ACACATTATA	TTAGATTTCA	TAGAACTGT	TGGAAATATC	60
TAGCACATGT	GCTTTATCCC	ACAATAATTA	CATAGAAAAT	TAAAAAGAAT	TAATTCTAAT	120
GTAACCATCT	TTTTACTTGA	CTTTTTTTTT	TTTGTCTCTG	CTCACAGGTC	TAATTGTTGT	180
TATTCTCACT	TTATTTTCT	ATAAGGTAGG	AATAATATCC	ACTTCATTAG	CTCATCATGA	240
GGGATAAGTA	GGATTGGAAA	AGATACTTTC	AAAGGGCACC	TAACGTGTAA	GAAGATGCCT	300
TCATTGTCAT	TTCTTTCTTG	GCACATTTCT	TGTTATCCAG	TCATTCATTA	GGACTCCATG	360
TTTATTGAAC	ACCTACTCTG	TGCCAGGCAC	TTTCTCTGT	TCTGGAAATA	TCACCATGTA	420
AAAACAAATA	GCTGAAGAAT	GCCCTGCCCT	CATAGAGCTT	ACAGACATAG	AGCTCGAG	478

(2) INFORMATION FOR SEQ ID NO:226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:226:

GAATTCGGCC	AAAGAGGCCT	AGCGTTTCTG	ACTTTATTAC	TGGTAATTTA	TTGCACAGGT	60
TTTTCTGCAT	CAAAAAAGTA	TCTGCTAAAA	TAGAGAAAGT	TGTGTCTGAA	TTCACATTTT	120
CCCCCAACTT	CTAAAAATAT	TTCCCCTAAA	AAAGAATCCA	CTCATCTAAT	TTTAAAGAAA	180
ATATACTTCT	TACACAAGAC	AATCCAAACT	GATGCAAAAT	ATTTATTCCA	AGTTAGTTAT	240
TTTATGCAGT	AGTTTCCCCC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:227:

GAATTCGGCC	AAAGAGAGAA	ATTTTAATCT	TGAAAGACTT	TTCAGGGTAT	CTCATTTTTT	60
AGGTGGGGGT	GGCAGGTGTA	TTTCTTTTTT	AACAAATAAA	AGGCATTTAA	GTAAAACTAA	120
AATGAAAAAA	GTAGGCCTTC	TGACATTGTG	TACTTGGTGG	TTCTGTCCCT	CTGCCTGTAA	180
CAAATCTCAT	TTTTGTTACC	AAGAACTGTA	TGAAAGAAGT	AAATCCACCC	CTCTCGAG	238

(2) INFORMATION FOR SEQ ID NO:228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:228:

GAATTCGGCC	AAAGAGGCCT	ATGCCTGTGT	TGGGTTGACA	GTGAGGGTAA	TAATGACTTG	60
TTGGTTGATT	GTAGATATTG	GGCTGTTAAT	TGGTGTGTA	GAATATTTGA	GCACAGGTGG	120
AGTAGAAACA	AATCACAAAG	ACTTTAAGGA	GTTGAGGTAT	AATGAAAGTC	TCACAAACTT	180
CAGTGTTCAT	GGGAAGAATG	GAACCACCAA	TGGAAGGATC	ACTCATGGTT	TCAAGTTACA	240
GAGTGCCTAT	GAGAGTGGCC	TGATGCCTTA	CACGAATTAC	ACATTTGATT	TCAAGGGTAT	300
AATAGACTAC	ATTTTCTATT	CTAAACCTCA	GCTGAACACC	TTAGGCATCC	TGGGCCCTCT	360
GGACCACCAC	TGGCTGGTTG	AGAATAACAT	CAGTGGCTGC	CCGCACCCCC	TCATCCCCTC	420
TGACCACTTC	TCACTTTTTG	CACAACTGGA	GCTCTTACTG	CCTTTCCTGC	CCCAAGTCAA	480
CGGCATTCTC	GAG					493

## (2) INFORMATION FOR SEQ ID NO:229:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:229:

GAATTCGGCC	AAAGAGGCCT	AAGAAATCAA	AATTAAAGCA	ATCAAATAAT	ACTCACATTT	60
ATATAAGAAA	TACTTCAATT	TACTTTCCAA	TGAGTAAAGT	TTTATATTTA	ATGTTTTAAT	120
ATTTTCATATT	TTAGTTTCTT	GCAATTATTT	ACTTTTTCTA	AAACCTACTT	AAATTAGGTT	180
TAAAAGTCTA	CTATATATAA	TTTGAAATTT	TATTCAGTTT	GCCTACAGGT	GTGTTTTAAC	240
CACTGTGTAC	ATAGTATTTA	ACGGTCTGCT	TTTTTTTTTT	TAATATGGT	TCATGNTGA	300
ACATCTGTAT	GTTCACTACT	TTCTTGACAA	AGTTCTAAAG	GTTACTGTGT	TGAAGCATAC	360
TGAACGATTA	CTGATAATTT	CTATTTTGAG	GAACAGGTAT	GTCAGTTCCT	TCTCTCTGTT	420
TGATAATTCT	CTCTTTTCCC	CTTAGGAATC	CAAAAATCCT	TGTGGAGTGT	CTTACTCCTG	480
ATTTTCGAGG	TGATCTCAAA	GCAATAGAAA	AAGTTGCTCT	GTCAGGATTA	GATGTGTATG	540
CACATAATGT	AGAAACAGTC	CCATTGCTCG	AG			572

## (2) INFORMATION FOR SEQ ID NO:230:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 193 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:230:

GAATTCGGCC	TTCATGGCCT	ATCGAGATAC	GCTTTCGCGC	ACCAGGTACG	CCTGGTGTTT	60
CTTTGTGGTT	TTTCGGATTG	TTTTTGGGGA	GTGCGGGGAG	TCACAGTTAG	AAGGCGGCCG	120
GGTGTGCTG	GAGGAAAGTG	CTGAGGTCCA	GAGCGTAGTC	CGAGGGCTCC	GAAGTCAGAT	180
TAAAGGGCTC	GAG					193

## (2) INFORMATION FOR SEQ ID NO:231:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 608 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:231:

```

GAATTCGGCC TTCATGGCCT ACATAATGAT GCTGCCTCAA AACTCGTGGC ATATTGATTT      60
TGGAAGATGC TGCTGTCATC AGAACCTTTT CTCTGCTGTG GTAACCTGCA TCCTGCTCCT      120
GAATTCCTGC TTTCTCATCA GCAGTTTTAA TGGAACAGAT TTGGAGTTGA GGCTGGTCAA      180
TGGAGACGGT CCCTGCTCTG GGACAGTGGA GGTGAAATTC CAGGGACAGT GGGGGACTGT      240
GTGTGATGAT GGGTGGAACA CTACTGCCTC AACTGTCTGT TGCAAACAGC TTGGATGTCC      300
ATTTTTCTTT CGCCATGTTT CGTTTTGGAC AAGCCGTGAC TAGACATGGA AAAATTTGGC      360
TTGATGATGT TTCCTGTTAT GGAAATGAGT CAGCTCTCTG GGAATGTCAA CACCGGAAT      420
GGGGAAGCCA TAACTGTTAT CATGGAGAAG ATGTTGGTGT GAACTGTTAT GGTGAAGCCA      480
ATCTGGGTTT GAGGCTAGTG GATGGAAACA ACTCCTGTTC AGGGAGAGTG GAGGTGAAAT      540
TCCAAGAAAG GTGGGGGACT ATATGTGATG ATGGGTGGAA CTTGAATACT GCTGCCGTTA      600
TACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 518 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:232:

```

GAATTCGGCC TTCATCGCCT ACAGCGCTGC CTTTCCTTAT GAAGAAGACA CAACTTGGA      60
TTCTCACTTG CATTATCTT CAGCTGCTCC TATTTAATCC TTTCGTCAA ACTGAAGGGA      120
TCTGCAGGAA TCGTGTGACT AATAATGTAA AAGACGTCAC TAAATTGGTG GCAAATCTTC      180
CAAAAGACTA CATGATAACC CTCAAATATG TCCCCGGGAT GGATGTTTTG CCAAGTCATT      240
GTTGGATAAG CGAGATGGTA GTACAATTGT CAGACAGCTT GACTGATCTT CTGGACAAGT      300
TTTCAAATAT TTCTGAAGGC TTGAGTAATT ATTCCATCAT AGACAAACTT GTGAATATAG      360
TGGATGACCT TGTGGAGTGC GTGAAAGAAA ACTCATCTAA GGATCTAAAA AAATCATTCA      420
AGAGCCCAGA ACCCAGGCTC TTTACTCCTG AAGAATTCTT TAGAATTTTT AATAGATCCA      480
TTGATGCCTT CAAGGACTTT GTAGTGGCAA ATCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:233:

```

GAATTCGGCC TTCATGGCCT ACCTTGATAC ATCAGCTGAC CTCATTTCGG GATACCTTTT      60
CCCCCCCAGAA AAGTACAACA TCTGGGCCGC CCCAGCCCGA AGACAGATCG TCCTGCCCTG      120
GACAATCAGA CGAATTCTCC CCCCCCCCAG AAAAAAAGAG CCATCCCCCC GCTCTGCCCC      180
GTCCGACATT CGGCCCCCGC GACTCGGCCA GAGCGGCGCT GGCAGAGGAG TGTCGGGCAG      240
GAGGGCCAAC GCCCGCTGTT CGGTTTGCGA CACGCAGCAG GGAGGTGGGC GGCAGCGTCG      300
CCGGCTTCCA GACACCAATG GGAATCCCAA TGGGGAAGTC GATGCTGGTG CTTCTCACCT      360
TCTTGGCCTT CGCCTCGTGC TGCATTGCTG CTTACCGCCC CAGTGAGACC CTGTGTCTCG      420
AG

```

## (2) INFORMATION FOR SEQ ID NO:234:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:234:

```

GAATTCGGCC TTCATGGCCT AAGAGATTAA GTGATTACT CAAGGTCATA TTCCTTGGA 60
GTAGCAAAAC TTCTGGACCA GATTTCGTAT TCCAAAGGCG GTACTGCTTG TACAACACTC 120
TGAGAAGTAA TTACTGTGGA GCAAAGCAAA AAGAAGTCTA AAAGCAGGTG ATAGGTGTAG 180
ATTTAGATAG TGTAAGGGTA GGCTAAAGTG TTGTAACAAA TGCACCCTCA AGTAGGTAAT 240
GGCTCAACA CAATAGATGT TCACTCCCA CATCTCAGAG CAAATTGGGT TCTCCTCATC 300
AGCTAAAGCT TTCCTACATG GGATGATTG GGGAGCAAGA CACTCCATCT ATGGCTCCCT 360
TACCCTCCAA GGCCTTCTTA TTGTCTTTAT GTAACCAAGT GAAGAGCTCG AG 412

```

## (2) INFORMATION FOR SEQ ID NO:235:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:235:

```

GAATTCGCCT TCATGGCCTA GGCTTCTTCG GAGCTGTGTA NTCTTAATTT GCTTTGCTGC 60
TGGCTGGCTG ACAGCTGATG GGGGACTCCT CANGACGGAC TCCCTTCCAG ATGCACCCAT 120
CTCCATCCTT CTCAACTCCC CAACCTTTGT CCTCCCCACT CTTGCTCGC GCGGCGGTCT 180
GAGACCACCA GGACCAGTTT CAGGGGTTTC CTTCTCCAGC GAGACTTGGC AGAACAGGCT 240
TTAAAAGCAA AGGAGGCAGC GGAAGACTGT GAATTCCTTT GGACAATTGA TGATATTTAT 300
CATTGTGCCC AGTTTCTACA AATAAAAGAT GGGTGGATTA TTTTCTCGAT GGAGGACAAA 360
ACCTTCAACT GTAGAAGTTC TAGAAAGTAT AGATAAGGAA ATTCAAGCAT TGAAGAAGTT 420
TAGGGAAAAA AATCAGAGAT TACAAAATT ATGGGTTGGA AGATTAAATC TGTATTCCTC 480
AGTTCTCTAT CTGTTAACAT GCTTAATTGT ATATTTGTGG TATCTTCTCG ATGAATTTAC 540
AGCAAGACTT GCCATGACAC TCCCACATCT CGAG 574

```

## (2) INFORMATION FOR SEQ ID NO:236:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:236:

```

GAATTCGGCC TTCATGGCCT AGGCGCGGCC CGGGTTCCCG TTCCCCGCGG AGCCATGCGG 60
TACAACGAGA AGGAGCTGCA GGCTCTGTCC CGGCAGCCGG CCGAGATGGC GGCCGAGCTG 120
GGCATGAGGG GCCCAAGAA GGGCAGCGTG CTGAAGCGGC GGCTGGTGAA GCTGGTGGTG 180
AATTCCTCT TCTACTTTCG GACAGACGAG GCCGAGCCCG TCGGAGCCCT GCTGCTGGAG 240

```

CGCTGCAGAG TCGTCCGGGA AGAGCCCGGC ACCTTCTCCA TCAGCTTCAT TGAGGACCCT 300  
GAGAGGAAGT ATCACTTCGA GTTCAGCTCG AG 332

## (2) INFORMATION FOR SEQ ID NO:237:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:237:

GAATTCGGCC TTCATGGCCT AATTGCAAGA TCACGGAATC TCCTGAATCA TTAAGAAAAG 60  
ATAAAATATC ACAAGCATCT TTAGTGTTAT GTGTATTCAG TAATTCTTTG GAGTTGTATT 120  
TATTAAGCTT ACCAGATTTT AAAGGCATAT AAAATGTGGT AAGATATGAG ACACATACTG 180  
AAATATCAGT GCAAAGGGAG AATGGTAGTT GAATGGTCAG AAACGAAAAA GCCTCGAG 238

## (2) INFORMATION FOR SEQ ID NO:238:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:238:

GAATTCGGCC TTCATGGCCT AGAAGCATTT TTTGTTATTG TGAAACATTT TTATACTTTC 60  
ATTATAATTT GTTGAGCCTA GAGTTGGGCT ATTTGAATAT TTATTATGAT AATCTTTTGG 120  
CTAATGGTAA CAGCATATCT TGTCTAACA AAATTACTGT TAACAGCAAT CGAACTCGAG 180

## (2) INFORMATION FOR SEQ ID NO:239:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 578 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:239:

GAATTCGGCC TTCATGGCCT ACTGAGATCC AGACCAGCTC CTCCAGACC TCTCCAGAAG 60  
AAGCCATGGG AACCCCTCGT ATCCAGCATT TGCTGATCCT CCTGGTCCTA GGAGCCTCCC 120  
TCCTGACCTC GGGCCTAGAG CTGTTTGTG AAAAGGGTCT GTCCATGACT GTGGAAGCAG 180  
ATCCAGCCAA TATGTTTAAAC TGGACCACAG AGGAAGTGGA GACTTGTGAC AAAGGGGCAC 240  
TTTGCCAGGA AACCACTA ATAATTAAAG CAGGGACTGA GACAGCCATT TTGGCCACGA 300  
AGGGCTGCAT CCCGGAAGGG GAGGAGGCCA TAACAATTGT CCAGCACTCT TCACCTCCCG 360  
GCCTGATCGT GACCTCCTAC AGTAACTACT GTGAGGATTG CTTCTGTAAT GACAAAGACA 420  
GCCTGTCTCA GTTTTGGGAG TTCAGTGAGA CCACAGCTTC CACTGTGTCA ACAACCCTCC 480  
ATTGTCCAAC CTGTGTGGCT TTGGGGACCT GTTTCAGTGC TCCTTCTCTT CCCTGTCCCA 540  
ATGGTACAAC TCGATGCTAT CAAGGAAAAC CTCTCGAG 578

## (2) INFORMATION FOR SEQ ID NO:240:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 334 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:240:

```
GAATTCGGCC TTCATGGCCT ACATGAATCC ACTCCTGATC CTTACCTTTG TGGCAGCTGC      60
TCTTGCTGCC CCCTTTGATG ATGATGACAA GATCGTTGGG GGCTACAAC GTGAGGAGAA      120
TTCTGTCCCC TACCAGGTGT CCCTGAATTC TGGCTACCAC TTCTGTGGTG GCTCCCTCAT      180
CAACGAACAG TGGGTGGTAT CAGCAGGCCA CTGCTACAAG TCCCGCATCC AGGTGAGACT      240
GGGAGAGCAC AACATCGAAG TCCTGGAGGG GAATGAGCAG TTCATCAATG CAGCCAAGAT      300
CATCCGCCAC CCCCAATCG ACAGGAGACT CGAG                                     334
```

## (2) INFORMATION FOR SEQ ID NO:241:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 368 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:241:

```
GAATTCGGCC TTCATGGCCT AGGGCACCAC TGAGTTCAGT ACTTCAAAT TGCCGTGCTC      60
TACCTCTCCC CAGTGACAAA AAACACTCTC CACACCAAGC TGCTGCTGCT GGGGGATGGA      120
GGGATGGCGT CAGCGATTCA AGACTGTTTT TCCTACCTGT TCAGCACTTC TTTCAGCGAT      180
ATGAAGTTAA ATCCAGTCTT TCCCTGTCTC CAGGCATCAT CGCCATCAAC ATACAGCCAT      240
ACTCCAGGAT TGCCCATCTT CAACATAAAC GGACTCTCCT GGACTCCACT TCCCACATCA      300
GTCACAGCCA CACTTCCTGA GAAAGAAGTC TACACTCTTC ATTCACTTC ATTCACCCCA      360
TGCTCGAG                                     368
```

## (2) INFORMATION FOR SEQ ID NO:242:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 478 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:242:

```
GAATTCGGCC TTCATGGCCT AGAGAAAATA AAGAGTTATA TCAGAAATTT ACAAAACATAA      60
CTTTTTAAAT TTAAATTGC AAAATATATA TCATACGAAA ATGAAAATTA TAATTCTTCT      120
TGGATTCTCG GGAGCCACAT TGTCAGCCCC ACTTATCCCA CAGCGTCTCA TGTCTGCCAG      180
CAATAGCAAT GAGTTACTTC TTAATCTTAA TAATGGTCAA CTTTGTCCAC TACAATTCA      240
GGGCCCCACTT AATTCATGGA TTCCACCTTT CTCTGGAATT TTACAACAGC AGCAGCAGGC      300
TCAAATTCCA GGAATCTCCC AGTTCTCTTT ATCAGCTCTA GACCAAGTTTG CTGGACTGCT      360
CCCAAATCAG ATACCCTTAA CAGGAGAGGC CAGTTTGTCC CAAGGAGCCC AGGCAGGCCA      420
AGTTGATCCC TTACAGCTTC AAACACCGCC TCAGACACAA CCAGGCCAC GTCTCGAG      478
```

## (2) INFORMATION FOR SEQ ID NO:243:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:243:

```

GAATTCGGCC TTCATGGCCT ACTTACAGAA CCTATTCACT GGGAAGGAAG CCCTCATTAT      60
AATGATTTTC ATTCTTATGT GTGTTTCAGG ACGACTGGGT TTGGATTCAG AAGAGGATTA      120
TTATACACCA CAAAAGGTGG ATGTTCCCAA GGCCTTGATT ATTGTTGCAG TTCAATGTGG      180
CTGTGATGGG ACATTTCTGT TGACCCAGTC AGGCAAAGTG CTGGCCTGTG GACTCAATGA      240
ATTCAATAAG CTGGGTCTGA ATCAGTGCAT GTCGGGAATT ATCAACCATG AAGCATACCA      300
TGAAGTTCCC TACACAACGT CCTTTACCTT GGCCAAACAG TTGTCCTTTT ATAAGATCCG      360
TACCATTGCC CCAGGCAAGA CTCACACAGC TGCTATTGAT GAGCGAGGCC GGCTGCTGAC      420
CTTTGGCTGC AACAAGTGTG GGCAGCTGGG CGTTGGGAAC TACAAGAAGC GTCTGGGAAT      480
CAACCTCGAG                                     490

```

## (2) INFORMATION FOR SEQ ID NO:244:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:244:

```

GAATTCGGCC TTCATGGCCT AGAAAAAAGA AACTGTCGTG GATACTGTCA GTGTATATAT      60
TTATGTGGTA CCTGAGAGCC ACCCCAAATT AGATTGACTT TAGATCGTTT ATACAAAAAT      120
AGCTTGAAGA ACTGTTTTTT CCATGGTAAA TGCTTTTGAA TATTAACCTA GTTATGTTAG      180
ATTCTACCT CAGTGGTACT GTCACAGCCA TTGGTTACAT TTCTGAAACC CTCAGAGTA      240
AGAGTTTGG TTTTTGTTT TGTTTTGTTT TGTTTTTTGA GATGGAGTCT TGCTCTGTCG      300
CCCAGGCTGG AGTGCACTGC AGCAACCCAG GTGGAGTGCA GTGCAACCTC CACCTCCAG      360
GTTTAAGCGA TCCTCCTAAC CTCGAG                                     386

```

## (2) INFORMATION FOR SEQ ID NO:245:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:245:

```

GAATTCGGCC TTCATGGCCT AGCTTCAGTA GCAAATAAGG ACATCATCTG CTATAACCTA      60
CAAGCAGTTG GACAGATATT CTACATTTCC TCATTTCTCT ACACCGTCAA TTACATCTGG      120
TATTTGTACA CAGAGCTGAG GATGAAACAC ACCCAGAGTG GACAGAGCAC ATCTCCACTG      180
GTGATAGATT ATACTTGTCG AGTTGGTCAA ATGGCCTTTG TTTTCTCAAG CCTGATACCT      240
CTGCTATTGA TGACACCTGT ATTCTGTCTG GGAAATACTA GTGAATGTTT CCAAACCTC      300

```

AGTCAGAGCC ACAAGTGTAT CTTGATGCAC TCACCACCAT CAGCCATGGC TGAAGTTCCA 360  
CCTTCTGCCA ACACATCTGT CTGTAGCACA CTCGAG 396

## (2) INFORMATION FOR SEQ ID NO:246:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 514 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:246:

GAATTCGGCC TTCATGGCCT ACACCTTTCA CTTATCTTAT AGTCACTTAA TTCCTCTACT 60  
 CTTATCATTT GATATTTTCA TTTTATTGTG TATCTCTGTN NGGCCAAATC AATAGATTTT 120  
 GAACAATCTC AACTTTAACC TTTTAAAAAA ATCTAATAGG CCCAGTTTCC TCTCAACAAT 180  
 CTTTGAAGAA CCTTCGAGAA AGGAGAAACA CAGACCTCCC GCTTCTAGAC ATGCACACTG 240  
 TAACCCGGGA AGAGGGAGAA GGCATGGAGA CAACTGATAC GGAGTCTGTG TCTTCCGCCA 300  
 GCACATACAC ACAGTCTTTA GAGCAGCTGC TTAAGTCTCC CGAAACTAAA CTTGGTATGT 360  
 TACTCTGTCT AAATATGTTT TTCTTATTTA ATTTCACTGT CTTATTTAAT TACTANTACT 420  
 CTAAGTTACA TATGCTTTTT NGGGCTGCTC CAATAAAATT TCTTTCAATA TTCCAATACC 480  
 TGTTTGTATT AGGTTCTCTA GAGGGACACT CGAG 514

## (2) INFORMATION FOR SEQ ID NO:247:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 323 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:247:

GAATTCGGCT TCATGGCCTA GGTTCCTGTG ACATGGAGAT TAACTGTCT TCCAAAGTGA 60  
 AGAGTTTATT GTTCTAGATC TTGAGCACAA AGGTTGGTAT ACGTTAATAA AAAAAATAGC 120  
 AAGGGAAGAA AATCATTTCC TTCATACCAA GTAAGAGAGC ACTTATCATG GTAGGCACTG 180  
 GCTTTGCAAT TATGAGACCA GTAGTAGAAA TAGCTTTAGT TTCCTCAATT TTCCTGGAGT 240  
 ATTCTTCAGA CTTTCTTTAC ACTGCTCAAG GTGGGGCGAG TGGCAGGGCG GACCCTGGCG 300  
 ACCTGACGCT GCGGAGGCTC GAG 323

## (2) INFORMATION FOR SEQ ID NO:248:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 423 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:248:

GAATTCGGCC TTCATGGCCT AGGAACAGTG TGTGTTTTTG TGTGTGGCTT GCATTCTCTC 60  
 CTCCGTTTTT GGAGCAGCGT GAGATTATTG CAATGCTACA TTTCCTCCCT CTGCGCCCTC 120  
 CTACCCCATC AATGTCTCAT GGGTGGTGTG ATAGAGGCTA TGGGAGTGAA GACCACTGGT 180



GTTAGTCTGT GTATAGTTCC TGGGGTGTGG CGAGTACCAG CTCTGACAGC GGAAGAGAAC	240
TATACTGTTG ATTCCCATTA TTCTCAGTAG GTGTGTTCTA TAAAATTGCT GCGAACACCA	300
AATTAGCGAA TCCTGAACCA TCGTTCACAG AGGAATAGGG GGTTAGGGTC CTGTGATCCT	360
CAAGTTGCAA CATTGTCTTC GACTGATTAA TATGTAACCT TGTTTTATAT GTGCAATCTC	420
GAG	423

## (2) INFORMATION FOR SEQ ID NO:249:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:249:

GAATTCGGCC TTCATGGCCT ACCGAAACCA AATAATTCAA GCACTGCTTA TTACAATTTT	60
ACTGGGTCTC TATTTTACCC TCCTACAAGC CTCAGAGTAC TTCGAGTCTC CCTTCACCCCT	120
CGAG	124

## (2) INFORMATION FOR SEQ ID NO:250:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:250:

GAATTCGGCC TTCATGGCCT ACATCTATGA CTTTTTAAAC ATGCGGCGTT TTGTGAATAT	60
CATGATAATA ACAAGAGTCA ACAGGCTAAG TGAGAGGAGA GGGATGCTAC GCCTACGCTG	120
CCCCCACCAC GGCCAGCCGG CTTCTGCGCC TTTGGTGTTG GATTTTCTTT GTGATTTTAC	180
GCGGTTTGT GTTTTTTTT TCTTGTTTT TGTTTGTTA TTTTTCCTG TCCACTTGAT	240
TTGCATGCAA CACCACAAA AAGGAAACAC AAAACCCCGT CTGCTCGAG	289

## (2) INFORMATION FOR SEQ ID NO:251:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:251:

GAATTCGGCC TTCATGGCCT AACTATGAG AGGACCGATT GTATTGCACA TTTGTCTGGC	60
TTTCTGTAGC CTTCTGCTTT TTCAGCGTTG CCACACAATG TCTGGCCTTC CCCAAAATAG	120
AAAGGAGGAG GGAGATAGCA CATGTTTATG CGGAAAAAGG GCAGTCCGAT AAGATGAACA	180
CCGATGACCT AGAAAATAGC TCTGTTACCT CAAAGCAGAC TCCCCAACTG GTGGTCTCTG	240
AAGATCCAAT GATGATGTCA GCAGTACCAT CGGCAACATC ATTAAATAAA GCAAAACTCG	300
AG	302

## (2) INFORMATION FOR SEQ ID NO:252:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 165 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:252:

```
GAATTCGGCC AAAGAGGCCT ATTTTTTTTT CTGCAACAC TGTGTATAGT GAGACTTGTT      60
CTACTTTGGA GAACAGGTTA CCTTTTGAAA ATGAGGTTGA GTTCTTCCT TTCTGATGCA      120
TTGATTTTGG AAGATTTTTT TTTCCCCCTT CCCCTCTCCC TCGAG                      165
```

## (2) INFORMATION FOR SEQ ID NO:253:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 376 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:253:

```
GAATTCGGCC AAAGAGGCCT AGCTTCTTTG TATAATTAAA TCTGAGTTTT GTTTGAGCAT      60
CTTTCAACAT GTACCATATT TATGACAATT CTCTTCATA GGATCTATCT GTTCTGCAAC      120
AAGTATTGAT CTTACAGTAA AATTTTTCAC AAATTCATTA GATTCTATGT CTCTTTTCT      180
GGTAGGAATT TTTGTGCAGG TAGCTATCTC TTGCCCTAGA TTATCTCCT TGTTTAGCTG      240
CTGATTCTTA AACTGGCCTC TAGATTTCCT GATTTCTTCC GGTACAGACT TTCTCTTTGC      300
AAGTTCTTCC ATCTCTAATC TTTGAGATTA ATCTTCTTTT GAAATGTCCT GCTGCTCTAC      360
TCTTGATGTT CTCGAG                      376
```

## (2) INFORMATION FOR SEQ ID NO:254:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 281 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:254:

```
TCTCCAAGGG AAAATAAATG CTTTACTAT CTAGTTTGTC TCTTTGAGAA TTAAAACTCT      60
TTTTTTTTTT TTTCATTCCA GTAGCTTTTG GGGTAGAGTT TGGCTCTTTG AGAATTGCAT      120
ACTAATTAAT TTTAGGGGTG ATTTGTACAT CATCTCTATA TTCCTGAAAC ACAGTAGAAA      180
CAGCCAGCAG TCAGGCAACC ATCTACCATG ACCATTAAAA CATCCCCAAA GTGAAACACC      240
AGATGTGATC TGCTAGATTT AGTGGAGGCG GCTGGCTCGA G                      281
```

## (2) INFORMATION FOR SEQ ID NO:255:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 571 base pairs
  - (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:255:

```
GAATTCGGCC AAAGAGGCCT AGCTAGNCTT GCTCAGCTTT GTGGATACGC GGA CTTTGT 60
GCTGCTTGCA GTAACCTTAT GCCTAGCAAC ATGCCAATCT TTACAAGAGG AAAGTGTAA 120
AAAGGGCCCA NCCGGAGATA GAGGACCACG TGGAGAAAGG GGTCCACCAG GCCCCCCAGG 180
CAGAGATGGT GAAGATGGTC CCACAGGCCN TCCTGGTCCA NNTGGTCNTC NTGGCCCCCN 240
TGGTCTCGGT GGGAACTTTG CTGCTCAGTA TGACGGAAAA GGAGTTGGAC TTGGCCCTGG 300
ACCAATGGGC TTAATGGGAC CTAGAGGCCC ACCTGGTGCA GCTGGAGCCC CAGGCCCTCA 360
AGGTTTCCAA GGACCTGCTG GTGAGCCTGG TGAACCTGGT CAAACTGGTC CTGCAGGTGC 420
TCGTGGTCCA GCTGGCCCTC CTGGCAAGGC TGGTGAAGAT GGTCAACCTG GAAAACCCGG 480
ACGACCTGGT GAGAGAGGAG TTGTTGGACC ACAGGGTGCT CGTGGTTTCC CTGGAACCTC 540
TGGACTTCCT GGCTTCAAAG GCAACCTCGA G 571
```

(2) INFORMATION FOR SEQ ID NO:256:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 453 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:256:

```
GAATTCGGCC AAAGAGGCCT ATGCGCAAGG ATCAAGCCGA CTACCTGTGC TGTCTACTGG 60
GACAGCAGTC TCCGAGCTAC TCCGTACCTC CCTCTGCCAG GTCGTGGAGT TAGGCCCCAG 120
TCCCTACTTG TCACTGGTTC CCACTGTGCT CCTAACTGTG CAGCACCTGG GAGCTCTGGC 180
CTGGGGCTGG AGGCCCTGGT AGGAGCTGCA GTTGGAGGCC GTTCTGTGCC CAGCAGCGGT 240
GAGCGGCTCC CATGGGCCCT GTGTCTGCAG GGAGCCAGGG CTGCGGCACA TGTGCTGTGA 300
AACTGGCACC CACCTGGCGT GCTGCTGCCG CCACTTGCTT CCTGCAGCAC CTCCTACCCT 360
GCTCCGTGTC CTCCCTCTCC CCGCGCCTGG CTCAGGAGTG CTGGAAGAGC TCACGCCTCG 420
GCCTGGGAGC CTGGCCTCTT GATATACCTC GAG 453
```

(2) INFORMATION FOR SEQ ID NO:257:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 307 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:257:

```
GAATTCGGCC AAAGAGGCCT ATGTCATGAG TGAACCTGGC AATTGCCTTG TTTAAACCAG 60
TTGGACATTA TCTCCACAT TGCGAAGCTA TACATGTCTG ATATGTTCTG AAAGAATAGA 120
ATTTATAGTT AGATATACTA TTTTGTGATTA TTTACTCAGA AGGAGACATG TAATTATTCT 180
TATGTTGTCA TGAAAATCTA TTAAATGCAT TTATATTTCAT CATCAATGTT ACGAAGTTCC 240
ATTATTATTA TTTTACAGAG GGAAGCCAA GATACAGGAG TGGAATTAC TTGCCTATC 300
GCTCGAG 307
```

(2) INFORMATION FOR SEQ ID NO:258:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 360 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:258:

```
GAATTCGGCC AAAGAGGCCT AAGAAGATGA ACAAGCGCCA GCTCTATTAC CAGGTTTTAA      60
ACTTTCGCCA TGATCGTGTC TTCTGCACTC ATGATATGGA AAGGCTTGAT CGTGCTCACA      120
GGCAGTGAGA GCCCCATCGT GGTGGTGCTG AGTGGCAGTA TGGAGCCGGC CTTTCACAGA      180
GGAGACCTCC TGTTCTCTAC AAATTTCCGG GAAGACCCAA TCAGAGCTGG TGAAATAGTT      240
GTTTTTAAAG TTGAAGGACG AGACATTCCA ATAGTTCACA GAGTAATCAA AGTTCATGAA      300
AAAGATAATG GAGACATCAA ATTTCTGACT AAAGGAGATA ATAATGAAGT TGCTCTCGAG      360
```

(2) INFORMATION FOR SEQ ID NO:259:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 411 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:259:

```
GAATTCGGCC AAAGGGGCCT ACCTGAAACG GCAGTCCGGT CCCTCCGACA TTGTCCAGCG      60
GAAGGCCTGG GCTTCACACT CTGTGCCTCC CGGCGCTACC TGGCACGATG CCGAGCACAC      120
AGCAGATGCT CAATGAATGC CCAACCAACC CTATACCTGG CTTGGATCTC AAGCTCCCTG      180
GCCGGGGCCT GATGGAAGGC TTTGGGGGCA CAGGAGGCTG CCCCCTTGGG CGCCCCCGGC      240
CACCTCTTCG CCCTCGAATC TCAGGCAGCT TGGTCAGGAA CTTCTTCTCC ACGTATTTAG      300
CGTGAATCCA GGCCTCCTTC TCCTGCCTGT GGGAGGGGAG AAGCACGCAG TCTTCCCTCT      360
TCTGCTCCAG GGTCCCCCA TTCCCTGGG AGGCTAAACC CATAGCTCGA G      411
```

(2) INFORMATION FOR SEQ ID NO:260:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 324 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:260:

```
GAATTCGGCC AAAGAGGCCT AGGGAGTGTT TCGGTTTCTT CTCCGTTTGG CAGTGAAACA      60
CATCTCAGAA AGGTGGAGCT GATCAGAATA ATGTTAGCA TCAACCCCTT GGAGAACCTG      120
AAGGTGTACA TCAGCAGTCG GCCTCCCTG GTGGTCTTCA TGATCAGCGT AAGCGCCATG      180
GCCATAGCTT TCCTGACCCT GGGCTACTTC TTCAAATCA AGGAGATTAA ATCCCCAGAA      240
ATGGCAGAGG ATTGGAATAC TTTTCTGCTA CGGTTCAATG ATTGGACTT GTGTGTATCA      300
GAGAATGAAA CCCTCAAGCT CGAG      324
```

(2) INFORMATION FOR SEQ ID NO:261:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 370 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:261:

```
GAATTCGGCC AAAGAGGCCT AGTGGGGCTG TATTTTAATA CAAGAAAGAC ATTGCTCTAG    60
AACATGGCTC GCCTTTGCTT CAGGGCCTAG CAGTTTATTT TAGCCATAAG GGTAAGGGAG    120
CAGGTCAGAA ATGACTTTTA GTGTAATCCT ATCTGTAATT AAAAATACAA ATGCTGTCAT    180
AAGATCAAAT GTTATCAAAA ATCAGTATTT AAAATTAAAT TTACCCCCAA ATTTCTTTCA    240
AAAAAGTTGT AATGTTCTTT TTCAGTGAAG CCTTTGCACT GCTAGAGCTG AAGAATGTGA    300
TCAATCGGCT TGTGAATAA TCCCGCACAG TAGGTATTCC GCTGAAGCCA ACTCTAGCTG    360
GGGGCTCGAG                                     370
```

(2) INFORMATION FOR SEQ ID NO:262:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 286 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:262:

```
GAATTCGGCC AAAGAGGCCT AAGAAATAGG ACTATACAAA TTTTCAACTT CTTTGTATAT    60
CAGTTTTGGT AAGATGCATT TTTCTTCTGA GAATTTGTTT CATTTGAATT TCCAAATTTA    120
TTAGCATGAA GTTGTAAATA AAAATCTTAT ATTTTACTC AAATTTGAG ATAGTTGTAG    180
ATTTACATGA AGTTGTAAAG AATAATAGAA AGATCCTGTG TACCTTTTCC CAGTTTTCCT    240
CAAAAGTAAC ATTTTGCATA ACTCTAGTAC AGTAGCACAA CTCGAG                                     286
```

(2) INFORMATION FOR SEQ ID NO:263:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 310 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:263:

```
GAATTCGGCC AAAGAGGCCT AGGCAAACCG TGTACTAAGC ATCAGTGCAG AGATAGTGAA    60
TGAGACACAG TATTCCCACC TTTGAGCAGT GCCAGTCTAG TATTAGAATA TTTTGGCTA    120
AAAAATTATT TTGAAGCATA AAGAAGCTTT TGTTTGCTCT GGTGATTTTC ATAACATATT    180
CACATTCTTA ATGTATTTT GGTTTTCAG AAAGTTACTT CTGGCCTGTG TTCTTTCAGA    240
ATATAGGTTG CAGCTTGTGT TAAGTGCAGG AACTATTGAT AGACTGAGTT TAGAAGAAGG    300
GAAACTCGAG                                     310
```

(2) INFORMATION FOR SEQ ID NO:264:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 321 base pairs  
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:264:

GAATTCGGCC	AAAGAGGCCT	AGGACTTTGG	GGCAGGTGAT	TAAATTTATA	TAGGTACCTC	60
AAGAAAAAGA	ACCTGAATAT	GCTGCATTTT	CTTTCTTTAG	CTTTTACATG	TAGCATTTTG	120
TTTTGCTTTT	GTTATTTTGG	TTTTGATATA	TGCTTTTGG	ACCCCAATAG	ACTGTTGAAA	180
GAAATTTAAA	AATTACTCTT	GTAGGGATAT	AGTATCCTTA	AAAAATAAAA	ATTAAAAAAA	240
ATTTAAAAAA	ATTGCTGCAA	TATCTGGCTC	GAAGGTTGCC	CTATATTAGA	ATAATACTTT	300
AGCCAAACAC	ATCAGCTCGA	G				321

(2) INFORMATION FOR SEQ ID NO:265:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 550 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:265:

GAATTCGGCC	TTCATGGCCT	TGTGATTCTG	CAAAGGAGGA	ACAATAATTC	ACTGTTTCCC	60
AAACTTATCT	GACCATAGAA	CATATNTCTC	AGAGTATTTT	TCAAGAGTAG	TATTTTCTGT	120
AATATATGAT	GAAAAATAAT	CGTATCGGCC	ATCTTGTGAC	ATAAGGTCAA	AATGTCAGCC	180
AGCCCTGAAA	TAAATGCAAG	CCAAAAGGTA	GAGAGATAAG	TGAATAAAGC	TGGCACACTG	240
TCAGTCCGGA	GTACCATGCT	GCATTCTGAG	TCAAGCTCCA	GGAAACTGAG	CTAGGGTTTG	300
TCTCTAAGAA	GAAAAACTGG	AGCGTCCAAA	GCTTCTGGAT	TCCATTTAAT	TAAAACCCCT	360
TTAAATTAAA	TCCTTGTAAC	TGAAGAGTAT	CGGTGGATGA	AGAAAAATA	GTCTCACATG	420
TCTTCATTTC	CATCCTTGGC	TCAGTACAGC	TCCAGTTCCA	TTATTCTTAA	ACATCTATTA	480
ACATGATTGC	TAAATAATTA	CACAGGCTAA	CTGCCAAGCA	TTTTTCACAG	GAAGCAAGGC	540
ACTGCTCGAG						550

(2) INFORMATION FOR SEQ ID NO:266:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 301 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:266:

GAATTCGGCC	TTCATGGCCT	AGTTAAGTGG	GAAGTTAAAT	GGCAAGTACT	AGAATGCCAC	60
CTATGGCAAG	CACTAGAATG	GTCTAGGTGT	GAAATGAGGG	AGTAATGTCA	GGGAGTCAAG	120
GTGGCCATCC	ATAGCAGTGA	TTCTTATCTG	GGGTAGGGGG	TGAATTTTCA	GTGGAGGGAG	180
GTCTCTGGAC	ATGGACCCCC	AGGCAGGGCT	ATCCAATCAT	CTGAGGGGTG	AGCAGTGTTC	240
AGCTCAGTAA	AAGTAAGGGA	AAAAAATAG	CAGTCTCTAA	AAGGAACATA	GAGCGCTCGA	300
G						301

(2) INFORMATION FOR SEQ ID NO:267:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:267:

```

GGGGAGAGCA TCAGGAAGAA CAGCTAATGG ATGCTGGGCT TAATACCTAG GTGATGGGAT      60
GGTCTGTGCG GCAAACACCA TGGCACAAGT TTACCTATGT AACCTGCACA TCCTGACATG      120
TACCCCTGAA CTTAAATGA AAGTTGGAGA CCAAAAAACA AAACACCATA AACTACAAA      180
ACTTCTTAAA CAATAAACTA GTAGAAAATT TCTAAAATAT ATAATCAAG AATTATATAA      240
GAGCTCTTTT TATATGTAAA TATAAATTTA AATACAAGAG AAACATCTAA AACAGGTTGC      300
TTCTGAGAAA CGTGACTGGT TATTAAGAAG AGGTATATAG GGGCTCACTC GAG              353

```

(2) INFORMATION FOR SEQ ID NO:268:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:268:

```

CATTATTTAA CCTTTTAAAC AATCAAGAGA TTGCTTTTAA AATTGTCTCT AAAAAGGTTT      60
GATTTTTTAC GAAAGAGAGA GCACTTGAAT ATATCTTTAT GTACCACCGT GTCTCTTTTT      120
GTTAGATTTT TCATCTGTGG GTATAATATA AAATATTCTT AAAATGAAAG CTTTACGCTT      180
GTGTTTGAGA CTAAGCAACT TGCATTGTGT CATGACCCTT CTAATACCAC AAACCCTCGA      240
G                                          241

```

(2) INFORMATION FOR SEQ ID NO:269:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:269:

```

GAATTCGGCT TCATGGCCTA CACTCAACCA CTGAAAAAGC TGAAAATCAA TGTTTTTAAG      60
GTTCAACAAGT GTGCCGTGTG TGGCTTCACC ACCGAAAACC TGCTGCAATT CCACGAACAC      120
ATCCCTCAGC ACAAATCGGA TGGTTCTTCC TACCAGTGCC GGGAGTGTGG CCTCTGCTAC      180
ACGTCTCAGC TCTCTGTGTC CAGGCACCTC TTCATCGTAC ACAAGTTAAA GGAACCTCAG      240
CCAGTGTCCA AGCAAAATGG GGCTGGGGAA GATAACCAAC AGGAGAACAA ACCCAGCCAC      300
GAGGATGAAT CCCCTGATGG CCCCCTCGAG              330

```

(2) INFORMATION FOR SEQ ID NO:270:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:270:

```

GCGGGCACCA TTTCCAGTAT GTACCAAACC AAAGCCGTCA TCATTGCAAT GATCATCACT    60
GCGGTGGTAT CCATTTCACT CACCATCTTC TGCTTTCAGA CCAAGGTGGA CTTCACCTCG    120
TGCACAGGCC TCTTCTGTGT CCTGGGAATT GTGCTCCTGG TGACTGGGAT TGCTACTAGC    180
ATTGTGCTCT ACTTCCAATA CGTTTACTGG CTCCACATGC TCTATGCTGC TCTGGGGGCC    240
ATTTGTTTCA CCCTGTTTCT GGCTTACGAC ACACAGCTGG TCCCGGGGAA CCTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:271:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:271:

```

GCCAGACTAC CACAAGCCCC ACCCACACTA TGCCAAGCCC TACCCATACC ACAGCAAGCC    60
CCAATCATAC TTCCACAAGC CCCACCCATA CCCCCACAAG TCCCACCCAC AAAACCAGTA    120
TGTCACCTCC CACCACTACA AGTCCTACCC CCAGTGGTAT GGGCCTAGTC CAGACTGCCA    180
CAAGTCCCAC CCATCCTACC ACAAGCCCCA CCCATCCCAC CACAAGCCCC ATCGTTATAA    240
ATGTAAGCCC TTCACTTCT CTAGAACTTG CTACCCTCTC CAGCCCCCTCC AAACACTCAG    300
ACCCCAACCCT CCCAGGCAAT GACTCCCTTC CTTGTAGTCC CCCAGTCTCC GATTCCTACA    360
CTCAGGCAGA CCCTATGGCC CCCAGAATC CCCACCCAAG TCTCGAG      407

```

(2) INFORMATION FOR SEQ ID NO:272:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:272:

```

ACTGAGCTCA AGGACCCCTC CAAGAAGAAG ATGCAGCACA TCTCCAACCT GTCCATCGCT    60
GTCATGTACA TCATGTACTT CCTGGCTGCC CTCTTCGGCT ACCTCACCTT CTACAACGGG    120
GTGGAGTCGG AGCTGCTGCA CACCTACAGC AAGGTGGACC CGTTTGACGT CCTGATCCTG    180
TGTGTGCGCG TGGCCGTGCT GACAGCAGTC ACGCTCACAG TGCCCATCGT TCTGTTCCCG    240
GTGCGCCGCG CCATCCAGCA GATGCTGTTT CCAAACCAGG AGCTCGAG      288

```

(2) INFORMATION FOR SEQ ID NO:273:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 537 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:273:

```

GAATTGGGCC TTCATGGCCT AGTCAAGCTA GGTAAGCTAA AAAGAAGAAA ACCTGGTTAC      60
AGCCCGGTGA ATTGATTTTT TTCCAGCCGA GAAATAGATA TTTCTCTCAC ATATATTTGG      120
AAAACCTTTAG TCATCTTCAT AAAACTTAAA AAGTTACCTA AGCACACACA GCAAGTTTCT      180
CCTTTCTTCC TTTTCCACAC CCTTACCAGT TCACTATGTT TCTACCAATC CAGTGCCCGAG      240
TTGCCAATGA TGTTGCTCTC ACATGAATT ACTGCATTCC CTTCTGGTTC CCCAGAAGGT      300
CTTGAAGAAA GAGGTTTCAGA CTAGTGGACC CAAACAGAAT TTCTTGGCTG GTGATACTCA      360
GATTGTGTTC AGAGCCTGGT ATGAAGAAGG GGCCAGGTGT AAGAAGTAGT TAATCAACTG      420
CACGTTGATT TCAGGCTGAA TATTCAACCA TCTGCAGCCA CCCGTCTCTA AAAGTCTAGC      480
TGAAGCACAA TTGATTGTGC CATAGAATGA GCAAACGCTT GAAAACACAA GCTCGAG      537

```

## (2) INFORMATION FOR SEQ ID NO:274:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:274:

```

GCGAGCTCGT GTTTTAAAGG ACCAAATAGA AGTTTACCAG GAGAGAAGTG ACAGAAGTGC      60
TGTCTAGATA GAGGAAGGGC ACACACAGAT GCAAGCATGT GCAGAAATGA GCAAACCACT      120
GAGACGCTGC CTTGAGCTCT GTGTCACACT GCTATGTTGC AGCCTGGGAG GCTGTTCCCA      180
TTGAGCCCT TCGGAACCAG CCATGAGATG GCACGGGTAC GCGGAAGGGA GCAGTCTCCA      240
TGGTGGGTG GTGATGGGGG CTTCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:275:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:275:

```

GATGGCTCCC CAGAGCCTGC CTTCATCTAG GATGGCTCCT CTGGGCATGC TGCTTGGGCT      60
GCTGATGGCC GCCTGCTTCA CCTTCTGCCT CAGTCATCAG AACCTGAAGG AGTTTGCCCT      120
GACCAACCCA GAGAAGAGCA GCACCAAAGA AACGGAGAGA AAAGAAACCA AAGCCGAGGA      180
GGAGCTGGAT GCCGAAGTCC TGGAGGTGTT CCACCCGACG CATGAGTGGC AGGCCCTTCA      240
GCCAGGGCAG GCTGTCCCTG CAGGATCCCA CGTACGGCTG AATCTTCAGA CTGGGGAAAG      300
AGAGGCCAAA CTCCAATATG AGGACAAGTT CCGAAATAAT TTGAAAGGCA AAAAGCTCGA      360
G

```

## (2) INFORMATION FOR SEQ ID NO:276:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:276:

GCCACAATAG	CGGGATTGAT	CTCCTTAGGA	CCTATCTTTG	GCGTTGCCAG	TTCCTTTTAC	60
CTTTTGTGAG	TTTAGGTTTG	ATGTGCTTTG	GGGCTTTGAT	CGGACTTTGT	GCTTGCATTT	120
GCCGAAGCTT	ATATCCCACC	ATTGCCACGG	GCATTCTCCA	TCTCCTTGCA	GGTCTGTGTA	180
CCTGGGCTC	AGTAAGTTGT	TATGTTGCTG	GAATTGAACT	ACTCCACCAG	AAACTAGAGC	240
TCCCTGACAA	TGTATCCGGT	GAATTGGAT	GGTCCTTCTG	CCTGGCAGAA	CTCGAG	296

## (2) INFORMATION FOR SEQ ID NO:277:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:277:

GAATTCGGCC	TTCATGGCCT	AGGATGTAGA	ATCCTGCTTA	TCTGTGAAAT	GCAGTTGACA	60
CATCAGCTGG	ACCTATTTCC	CGAATGCAGG	GTAACCCTTC	TGTTATTTAA	AGATGTAAAA	120
AATGCGGGAG	ACTTGAGAAG	AAAGGCCATG	GAAGGCACCA	TCGATGGATC	ACTGATAAAT	180
CCTACAGTGA	TTGTTGATCC	ATTTAGATA	CTTGTGGCAG	CAAACAAAGC	AGTTCACCTC	240
TACAACTGG	GAACAATGAA	GACAATGAAC	TCGAG			275

## (2) INFORMATION FOR SEQ ID NO:278:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:278:

TCGTTCCCTT	CATCTCTTCC	CTTGCCAGAG	CAGGGACTCT	CTCCATATAA	ACAAAAGGAA	60
AACCACTGGC	CAGGGTATGG	TCAATACCTC	AACATATCCA	GACATCACAG	CACCAGAACA	120
CCAGTATGTA	TATTCCACAA	GTACTCGAG				149

## (2) INFORMATION FOR SEQ ID NO:279:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:279:

GCAATCAGAT	AAAGAAAGAC	CTGGCTGACA	AGGAGACACT	GGAGAACATG	ATGCAGAGAC	60
ACGAGGAGGA	GGCCCATGAG	AAGGGCAAAA	TTCTCAGCGA	ACAGAAGGCG	ATGATCAATG	120
CTATGGATTG	CAAGATCAGA	TCCCTGGAAC	AGAGGATTGT	GGAAGTGTCT	GAAGCCAATA	180
AACTTGCAGC	AAATAGCAGT	CTTTTTACCC	AAAGGAACAT	GAAGGCCCAA	GAAGAGATGA	240

TTTCTGAACT CGAG

254

## (2) INFORMATION FOR SEQ ID NO:280:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:280:

GACAGCCTGG	AAGTTTGGAG	ACCCTGACAC	ACCCACCTTC	TCACCTGGGC	TCTGCGTATC	60
CCCCAGCCTT	GAGGGAAGAT	GAAGCCTAAA	CTGATGTACC	AGGAGCTGAA	GGTGCCTGCA	120
GAGGAGCCCG	CCAATGAGCT	GCCCATGAAT	GAGATTGAGG	CGTGGAAAGC	TGCGGAAAAG	180
AAAGCCCGCT	GGGTCCTGCT	GGTCCTCATT	CTGGCGGTTG	TGGGCTTCGG	AGCCCTGATG	240
ACTCAGCTGT	TTCTATGGGA	ATACGGCGAC	TTGCATCTCT	TTGGGCCCAA	CCAGCGCCCA	300
GCCCCCTGCT	ATGACCCCTG	CCTCGAG				327

## (2) INFORMATION FOR SEQ ID NO:281:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:281:

GCCTGGAACC	TGATTCTCCT	GACCGTCTTT	ACCCTGTCCA	TGGCCTACCT	CACTGGGATG	60
CTGTCCAGCT	ACTACAACAC	CACCTCCGTG	CTGCTGTGCC	TGGGCATCAC	GGCCCTTGTC	120
TGCTCTCAG	TCACCGTCTT	CAGCTTCCAG	ACCAAGTTCT	ACTTCACCTC	CTGCCAGGGC	180
GTGCTCTTCG	TGCTTCTCAT	GACTCTTTTC	TTCAGCGGAC	TCATCCTGGC	CATCTCCTTA	240
CCCTTCCAAT	ATGTGCCCTG	GCTCCATGCA	GTTTATGCAG	CACTGGGAGC	GGGTGTATTT	300
ACATTGTTCC	TGGCACTTGA	CACCCAGTTG	CTGATGGGTA	ACCGACGCCC	GCTCGAG	357

## (2) INFORMATION FOR SEQ ID NO:282:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:282:

GCGGGCTGCA	GAATGATAGA	CGAGCTCAAC	AAAACGCTGG	CCATGACCAT	GCAGAGGCTG	60
GAAAGCTCTG	AGCAGCGGGT	CCCCTGTTCC	ACTTCTTACC	ACAGCTCTGG	GTTGCACTCG	120
GGTGATGGGG	TCACCAAAGC	AGGACCTATG	GGCCTTCCAG	AAATAAGACA	AGTGCCAACT	180
GTTGTGATTG	AATGTGATGA	CAATAAAGAA	AATGTGCCCTC	ATGAGTCAGA	CTACGAAGAC	240
TCTTCTTGCC	TGTATACAAG	AGAAGAGGAG	GAAGAGGAGG	AGGACGAAGA	CGACGACGAA	300
CTCGAG						306

## (2) INFORMATION FOR SEQ ID NO:283:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:283:

```

AATCAATCAA CTAGGCATAT GACACAGTAG TCCATTATAA AAGAAGACAT ACATCCAGCA      60
CCATCAACTA ATTCTTAAGA TAAGTTATCT GGGAAAATTG AAGAACAAAT AAATTCAACG      120
AAATACTGTA AAGTGAACGA AGACATAAAA CCAAAGAAAA CTGAGGCCAT TTCTGCCAAG      180
AAAGGAACAG CAAAGAGTAA AGATGAAAAA TATTCTAAGA TAATACCAGA AAAAGATAAT      240
TCCTACATGG ACAAAGATGA GCATGGTTCA TCCTCTGAAA GTGAAGATGA AGCGCTGGGT      300
AAATATCATG AGGCCTTATC CAGAACACAC AATTCCGGAC TACCACTCGA G              351

```

## (2) INFORMATION FOR SEQ ID NO:284:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:284:

```

AAGTTAAAGG TATTAAATAA ATGAGTTTCT CCTTAATTTT GTTAATGCTC TTTTAGCTAA      60
TAAGACTTTT TCTAGAGTTA CATATTTTAA TCTGTTTCAT TTTTATTTTT TCCTTTGGTT      120
TTATATTTTT AAAAGCCATT ATATCCCTCC CACTGGTAAC ATACACATAC ACAGACACAC      180
ATCTATTTC AATGAATACT TACTACTTTA TCATTTCAG TCTTAATTGT ACT              233

```

## (2) INFORMATION FOR SEQ ID NO:285:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:285:

```

GCGGCGCCGC AGCAGTTCCA GGAAGGATGT TACCTTTGAC GATGACAGTG TTAATCCTGC      60
TGCTGCTCCC CACGGGTCAG GCTGCCCCAA AGGATGGAGT CACAAGGCCA GAATCTGAAG      120
TGCAGCATCA GCTCCTGCCC AACCCTTCC AGCCAGGCCA GGAGCAGCTC GGACTTCTGC      180
AGAGCTACCT AAAGGGACTA GGAAGGACAG AAGTGCAACT GGAGCATCTG AGCCGGGAGC      240
AGGTTCTCCT CTACCTCTTT GCCCTCCATG ACTATGACCA GAGTGGACAG CTGGATGGCC      300
TGGAGCTGCT GTCCATGTTG ACAGCTGCTC TGGCCCCTGG AGCTGCCAAC TCTCCTACCA      360
CCAACCCGGT GATCTTGATA GTGGACAAAG TGCTCGAG              398

```

## (2) INFORMATION FOR SEQ ID NO:286:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 462 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:286:

```
GAATTCGGCC TTCATGGCCT ACACCCAGCC AATTTTTTTG TATTTT TAGT AGAGACGGGG      60
TTTCACCATG TTAGCCAGGA TGGTCTCTAT CTCCTGACCT CATGATTTGC CCGCCTCGGC      120
CTCCAAAAAA AGAACATTTT ATATTGAGT GCTATTCTTT TTGCGGCACC AAAACTTTAT      180
AACACACTGC CTTCTGAATT TTTTTTTTGG GTTCTGCTC AGCTCATTGT TAATCATATT      240
GTTCCCATGT ATGTCATGAG TTATTTTCTT CCTAGTCTTT TCAAAATTTT CTTGTCTTTG      300
ACTTTTAACA GTTTAATTGT AACAGTGTAT ATCTTTAAAG TTAAATTCAT GCTTGTGAAT      360
TTTTATAAGA GCCACAAAGG CCTTCCTCTG TGTTTGTGTT TTGTTTGTGT TTTTGTTTTC      420
ATTTTGTAGA CAGGCTCTCA CTGTCCTCTA GTGGCTCTCG AG                          462
```

(2) INFORMATION FOR SEQ ID NO:287:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 281 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:287:

```
TGGACAGTCT AGAAGATGCT GTGGTGCCCC GGGCTCTGTA TGAGGAGCTG CTGCGCAACT      60
ACCAGCAGCA ACAGGAAGAG ATGCGCCACC TCCAGCAGGA GCTGGAGCGG ACTCGGAGGC      120
AGCTGGTACA ACAGGCCAAG AAGCTCAAGG AGTACGGGGC ACTTGTGTCT GAAATGAAGG      180
AGCTCCGTGA CCTTAACCGG AGGCTCCAGG ACGTGTGCTT CCTGAGGCTT GGCAGCGGTC      240
CCGCCATTGA TCTGGAAAAA GTAAAGTCAG AATGTCTCGA G                          281
```

(2) INFORMATION FOR SEQ ID NO:288:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 421 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:288:

```
AATGGAAGTG CTGACACAAT ACTCGTGTA CTGTGTGGAA CCGCATAATC CCAGCAATGG      60
CACATTGAAG GAATGGAGGG AATCCAATAT TTCTGCCTCT GACATAATTT GGGAGAACCT      120
AACTGTGTCA GAATGCAAAT CATTGCATGG AGAGTATGTT GGACGGGCCT GTGGCCATGA      180
TCACCCATAT GTTCCAGATG TTCTATTTTG GTCTGTGATC CTGTTCTTTT CCACAGTTAC      240
TCTGTGAGCC ACCCTGAAGC AGTTCAAGAC TAGCAGATAT TTTCCAACCA AGGTTCGATC      300
CATAGTGAGT GACTTTGCTG TCTTCTTAC AATTCTGTGT ATGGTTTTTA TTGACTATGC      360
CATTGGGATC CCATCTCCAA AACTACAAGT ACCAAGTGTT TTCAAGCCCA CTAGGCTCGA      420
G
```

(2) INFORMATION FOR SEQ ID NO:289:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 417 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:289:

```
AAGCCAATGG CTGGTCGTGA TCCTGAATGC CAACGCACAG AAATGATTAA GAAAGAAGAA      60
GAACGTTTGA GGGCTTCCAT ACGTAGGGAA TCTCAGCAGC GCCGAATGAG AGAGAAACAG      120
CACCAGCGGG GGCTGAGCGC CAGTTACCTG GAACCTGATC GATACGATGA GGAGGAGGAA      180
GGCGAGGAGT CCATCAGCTT GGCTGCCATT AAAAACCGAT ATAAAGGGGG CATTGAGAG      240
GAACGAGCCA GAATCTATTC ATCAGACAGT GATGAGGGAT CAGAAGAAGA TAAAGCTCAA      300
AGATTACTCA AAGCAAAGAA ACTTACCAGT GATGAGGTAA GACCAAATTT ATTCAATTCT      360
AGGGGTTTAT CCTGTACTCA GGAGCCAACT GCTTTGAATG AAAAGCTCAC ACTCGAG      417
```

(2) INFORMATION FOR SEQ ID NO:290:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 314 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:290:

```
CAAGCATACA ATCAACTCCA AGCTCGGTAT CACCTGAGCC CAGGAAGTGG AGGCTGCAGT      60
GAGCTATGAT CAGTAAAACA CAAGACAGGT TCACTGGCTC CCATCCCAAC CCGGACCAGC      120
TCCCTAGTAT AACAACTCAC ATGCATGTGG ACTATACCCT TACAGCCTTC TTCTGTGTGT      180
TTATGTGCAT ATATGTAGCC ATAGGAAAAA AAATCAAAT CCTTTGGTGT TCTTTCTTAT      240
TTTTTCAAAT ATTTCACCTG CCCATTCTC TTTCTTTCT CTTCTAGTA CTCCATTGC      300
ATGCAGTTCT CGAG                                     314
```

(2) INFORMATION FOR SEQ ID NO:291:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 361 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:291:

```
GTGTATGTGG GGGGTAAGTG TGTGTGTGTG CGTGTGCGTG TATGTGCACG TGTGTGTGT      60
GTGCGCTGAC ACACGGAGAG CCCACTCATA CGTAGCAGAA AATCAAATGG CCCCAAATCA      120
GAAACATGGC GCATGTGAGC ATGCCACTTC TTGTGTGCCT GTGACTGTTC AGAATGTACA      180
CGGCCCTGCA GCTCCCGAAG GCCAGCTCTG CTGCAACCCC TCCTCTGTCC AACACAGTCC      240
TCACTGGTGT CTTTTCCTCT TCAAATCTAC AGCATTCTG ATCTCTGCAA ACAATTTAAC      300
CCAAACCAA GTTCTGGCTG ACAAGGCTAC ATCTTGTTTC TTGTGCGTGA TTAGCCTCGA      360
G                                                                 361
```

(2) INFORMATION FOR SEQ ID NO:292:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 237 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:292:

```

GCGATTGAAT TCTAGACCTG CCTCGAGTCG ATGCACCGAA AAGGGTGAAG TAGAGAAATA      60
AAGTCTCCCC GCTGAACTAC TATGAGGTCA GAAGCCTTGC TGCTATATTT CACACTGCTA      120
CACTTTGCTG GGGCTGGTTT CCCAGAAGAT TCTGAGCCAA TCAGTATTTC GCATGGCAAC      180
TATACAAAAC AGTATCCGGT GTTTGTGGGC CACAAGCCAG GACGGAACAC ACTCGAG        237

```

## (2) INFORMATION FOR SEQ ID NO:293:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:293:

```

GAATTCGGCC TTCATGGCCT ACTTTATTTT TTTAATTATT ATTAGTATTA TTTTGAGACT      60
GAGTCTTGCT CTATCACCCA GGCTGGAGTG CAGTGAGCTG AGACTATGCC ACCGCACTCC      120
AGCCCGGGCG ACAGAACGAG ACTCCATCTC NAAAAAAAAA AAAAAAATCT ATGTTTCATGC      180
CTTNACACCT GTTTCTGCAC ATAGCTGTGC AGTATATTCT TCTTCTAAGC AACGACCCAG      240
TGAAGATCCA AACAAAAGTT CACAAATATG TAGTTATCCA AGGCACCTCG AG              292

```

## (2) INFORMATION FOR SEQ ID NO:294:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 136 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:294:

```

GAATTCGGCC TTCATGGCCT ACAATCTTTT AACTTTGGGG GTCACAGTTT TAGCCACCTT      60
TCGGGGGGTG ACTGGAGCAG TAGGAGGTGT GGGGTCATTT TATGAATATA ATAAATGGA      120
GCTGACTGTA CTCGAG                                136

```

## (2) INFORMATION FOR SEQ ID NO:295:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:295:

```

GAATTCGGCN TTCATGGCCT AAAATAACAC ACAATTAGTA TAGAAAAATT GCAAACACAG      60
ATAAAAGTCC TTTCCCTGTG AATTTCTGAA TGCACCTTTG AATATTCACA TCTTACTGCC      120
AAAATGAGAT TGTCTTGTGT GCCGTTCTGG AATTTGCTTT TTTCCAGCTT ACATGTTCTA      180
GGTCCTTCCA GATCAATAGC TGCACCTCCT CTTTCCTCTG CTGGTTTCTC AGCTCGATGG      240
GCTGTAAGTG GCATTACTCT CGAG                                         264

```

## (2) INFORMATION FOR SEQ ID NO:296:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:296:

```

GAATTCGGCC TTCATGGCCT ACAACCTCAT AAATCTCATT CTTAATTTC A CTCTAGGACA      60
GAATTATTGT AGCACCTGTG TTCTGTTATT TTAGATTCAT TTAACTTAC CTAGACACGG      120
GTA CTGTGGT AGTTGTAGAG GTACAGATGT TGAGTTCCCA TCCTCCTGGC TTAATGTCAC      180
TGGGGTTATT AATACTTTC ATAAGCATTT TAGGGACACC TGCTGTCTGC TCAACCCCCA      240
GCAAACCTCGA G                                         251

```

## (2) INFORMATION FOR SEQ ID NO:297:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:297:

```

GAATTCGGCC TTCATGGCCT ACATCTGGTA AATTTTCTTT TCTGCCTGAG GAACACCCTT      60
TAGCATTTAT TTAGTCTGCT GGTGACCAAT TCTCATATTT TGTTTGTCTG AAAAATACCT      120
TTATTTTGTT TTAATTCTTG AAAGATATTT GCACTGGTGT GATTGGATT C ATGATTGCTT      180
ATTATTTTCT TTTCTTTTTT TCTTTTGTGA GACAGAGTCT CGCTGTCGCC CAGGCAGGAG      240
TGCACTGGCC CGTACTCGAG                                         260

```

## (2) INFORMATION FOR SEQ ID NO:298:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:298:

```

GCTCTGAATC TATTTTCTAG GACATTTTTT TCCCATTTAG ATTAAGCCAG AGAGAGCCCT      60
TTCTTGCCCT CCAAGAGTTT TTCTTTGTGT GACTGTTGGT ATTCTGAACC TCTTGGATT      120

```



GATGCCTGGA ATTGTCCTAG AGACTCTCCT GATTTCGTGTC TCATTCCTTG ATTTCACCCT 180  
 GGGGAGCTGG GGAAGAGATA CCTTCCCATG GCATCACTTG TTAAGAGTGG ATCCCCCTTC 240  
 CCCCCTTCCT TCTGTCCCCC TCGAG 265

## (2) INFORMATION FOR SEQ ID NO:299:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:299:

GAATTCGGCC TTCATGGCCT ACCAAAACAA AAGAAGAAAT CATTCTACTC ATGCTTAGAA 60  
 AGATGTCAAG AGGATGGAGG ACTCACATTC TGTTAACTCT TCTGCCTGTA ATATATGCTT 120  
 TAAACACTAA AAATGATGAG CATGAATCTG CAATTCAAGC CCTCAAAGAT GCTCATGAAG 180  
 AAGAAATTCA ACAAATTCTT GCTGAAACAA GAGAAAAAAT ATTGCAGTAT AAAAGCAAAG 240  
 TAACAGAGGA GCTAGACCTT AGAAGAAAGA TTCAAGTTT AGAATCATCA TTAGAAGATC 300  
 ACAATCTCGA G 311

## (2) INFORMATION FOR SEQ ID NO:300:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:300:

GCGATTGAAT TCTAGACCTG CCTCGAACTC GTGGCCTCAA GTGATCCACC TGCCTCACCC 60  
 TCATCACCTG CCAAGTCCTA CCCATTCTAA CCCTGATAGC TCTTAAATCA GGTCTTTCCA 120  
 CCTCAACCTC ATTATCACTG CTCTAGAGCT CAAGCCTTCA GTGTCCTTTC ACTTCCTGAA 180  
 TTTACTGTCT TAGTGCTCTT GCTCACATTG TATTCTNTGC CCAAATGCT CTTACCACTC 240  
 CNNTTCTTTC TCGAG 255

## (2) INFORMATION FOR SEQ ID NO:301:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:301:

GAATTCGGCC TTCATGNCCT ACTTGGATTT ATCACAGTAG CATTGTCTT CAATCTGTGT 60  
 GTTAACTAGA AATCAAGGAA AGACATGAGG AGATTGTCT ACTGCAAGGT GGTCTTAGCC 120  
 ACTTCGCTGA TGTGGGTTCT TGTTGATGTC TTCTTACTGC TGTACTTCAG TGAATGTAAC 180  
 AAATGTGATG ACAAGAAGGA GAGATCTCTG CTGCCTGCAT TGAGGGAGAT CCGCACGCAG 240  
 CTGGTGGAGC AGTTCAAATG TCTGGAGCAG CAATCAGAGT CGCGACTGCA GCTGCTTCAA 300  
 GACCTCCAGG AGTTTTTCCG CCGGAAAGCT GAGATTGAGC TCGAG 345

## (2) INFORMATION FOR SEQ ID NO:302:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 300 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:302:

```
GAATTCGGCC TTCATGGCCT AATCCTCCAG ATTATTATGG ATATGAAGAT TATTATGATT      60
ATTATGGTTA TGATTACCAT AACTATCGTG GTGGATATGA AGATCCATAC TATGTTTATG      120
AAGATTTTCA AGTTGGAGCT AGAGGAAGGG GTGGTAGAGG AGCAAGGGGT GCTGCTCCAT      180
CCAGAGGTCG TGGGGCTGCT CCTCCCCGCG GTAGAGCCGG TTATTCACAG AGAGGAGGTC      240
CTGGATCAGC AAGAGGCGTT CGAGGTGCGA GAGGAGGTGC CCAACAACAA TGATCTCGAG      300
```

## (2) INFORMATION FOR SEQ ID NO:303:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 258 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:303:

```
GAATTCGGCC TTCATGGCCT AAAAAAAGA AGTTTATTTA AAGAACTCT ATAAGAGCAG      60
CTTGGATTTT ATATCTTTAG ATCCAGAGTT TTTACTTTTC TGGAATTAAA TATAATTGTT      120
TGGAATTTAC TCTTTATTGT TGAATTTTAA AGCGTACTA AAGTAGTGCT TCTTAAGATA      180
ATTGTCATGT GTTTTGTGTT TGTGTTGTTT TGTGTTTGG TGCTGAGTGT TGCTCTGTCG      240
CTCAGACTGG AGCTCGAG                                258
```

## (2) INFORMATION FOR SEQ ID NO:304:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 262 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:304:

```
GAATTCGGCC TTCATGGCCT ACAATTCCGA TAAAGTTTAA GGTGAGCTGA TGAAGAACAC      60
TCAAACCAAA GTCGCCCATT GGAGGAGCGC CCTACCTCAC AGGAATAGGC CTGCATTATT      120
AGTATACCTT CTTCAATTCAG TTATTGTTAT TCTTATGGAA ACAACCCATG GGAAATGTAG      180
CCTTGGCATG ACTGTATCAA TGGATTCAGA GAGCAGTAGC GGGGACCCCC CCAGTCAATT      240
ACGTTCCACA GCAAGTCTCG AG                                262
```

## (2) INFORMATION FOR SEQ ID NO:305:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 298 base pairs
  - (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:305:

GAATTCGGCC	TTTCATGGCC	TAAATCTCAT	AAATAGAAAG	NAAAATAATC	TAGAAATTTT	60
TCAAAGCTAG	TACTCTTTCT	CCTTATAAAT	GTACACAATT	TTAATCTTTT	TACAAATTTA	120
TTTAACTGTA	CCTACTGTAC	TTATTGTAGA	TTCAATGACG	CAGTTAAGTC	ATCACCCAAG	180
GATTTATGAA	TTTGAGATTA	CTGACCTGTT	TTCTTCATAT	TGCATTCAAC	TCAATATTTG	240
TGAATTGTGTT	GTTTCACTTT	TCATTCAAAC	AAAAAATATT	CCCCCAAGAA	AACTCGAG	298

(2) INFORMATION FOR SEQ ID NO:306:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 263 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:306:

GCGATTGAGT	TCTCCCTGCT	GGTTCTTTTG	AATCACACCA	AATGAATGGC	TTGCTACTGT	60
TCCCTCACAC	CTTCATATTG	TCCATGGTTT	TTCCCACCTC	CTTAGCTATA	CAGCTGCTGT	120
TCCTCCTGCC	TAAAATGTCT	GAACATTCCC	TCAGTGTTC	GCTCAGCCCA	CATCTTACAT	180
CTTCCCTAAG	GATGTTTTTC	TGCTGCTATC	ATTCATTTC	TTCTATGAG	TTCTCTGT	240
ATATTGCGCC	ACCAGAACTC	GAG				263

(2) INFORMATION FOR SEQ ID NO:307:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 267 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:307:

GAATTCGGCC	TTCATGGCCT	AGCCCCGACT	AGCTTTGCC	TAACTCCTTC	ATCAAAAGAC	60
CCCCCGCCAG	CTTCCCACAC	CTCATACGCA	GCCACATCTG	CCCTATTCTC	CATGCTTTCC	120
AGCTTGCCCTG	CCCTTCCTCA	TCTCTCCCTG	CCTGTGCAGA	CCTCCACCCT	TCTTTCCTCC	180
ACCCCTCCAT	CCCCCAATGC	TTGTAGACCT	TCCATTCAAT	CCGTCTCATC	GTGCGTGGTC	240
TCTGATCGTC	CATCACCTGA	CCTCGAG				267

(2) INFORMATION FOR SEQ ID NO:308:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 261 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:308:

```

GAATTCGGCC TTCATGGCCT AGCCAAAATC ACAAGAAAAA TAACTTTGAC TTTGAAAACA      60
AATAAGTTAG AAATGCAGTG TTTGCACTTC GTGGTTTATG TTTGCTTTGG TGGCCTCTCA      120
TTCCCACTTA GCCTCAGTCT CCAGGGCCTG GGCTCCACCA AGGAAGACTC CATCTGCTCT      180
CTCTATTTGC ACACTGGGAA CTTTTTTCCC CAAGGTACAG GATATGATTC AGGGTTTATG      240
GATGACCTCC CACCCCTCGA G                                     261

```

## (2) INFORMATION FOR SEQ ID NO:309:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:309:

```

GAATTCGGCT TCATGGCCTA CCTATTCCCA AACTTTAAAT GTTGTCTACC AAATACTGAC      60
AATTATGAAA ATTCTACCAG TAGAACACAC CTCCTTTTG AGCTCCAGAG CACATGCTTG      120
ACATCTCATA TTAGAAAGAA TCTTGATTTT CCCTCCAGTC TAGTCTTTCA TGTTTTGTTT      180
TTCTTTGTGA GAGTCTCCCT CAGCCTGCAA TGGCGTGATC TCGGCTCACT TCAACCTCCC      240
GTGCTCGAG                                     249

```

## (2) INFORMATION FOR SEQ ID NO:310:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:310:

```

GAATTTGTTT NAAAAAAAAA AAAAAAAAAA AGGGCNGGGG GGAAAAAAAA AAAAAAGAAC      60
TCCTGGAGAG GGAAATAGCA AATGTGTCTT GCCTTTTGTT GCTCTCTCTC TCTTTTTTTT      120
TCTCTCGCTC TCTTTCTTTC TCTTCTTCTC TCTGTTTTTA AGTCAAGCAT TGGTCTCGAG      180

```

## (2) INFORMATION FOR SEQ ID NO:311:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 742 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:311:

```

NNNNNNNNNN NNNNNNNNNN NNNNNNNANN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      60
ANNNNNNNNN NNNNNNNNNN NNNNNNNNNN ANNNNNNNNA NNNNNNNNAN NNNNNNNNNN      120
NNNNNNNNNN NNNNNNANNA NNNNNNNNNN NNNNNNNNAN NNNNNNNNNNA NNNNNNNNNN      180
NNNNNNNANN NNNNANNNNN CNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      240

```

```

NNNNNNNNNA NNNNNNNNAN NNNNNNANNN NNNNNNANAN GNANNNNNNN NNNNNNNNNN 300
NNANANANNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNC CCCCTTTGTC 360
ATNGTTNTCG TTCCCNNTCT TCCTTGTTTC TTTTTCGGCA CAATATTTCA AGNTATACCA 420
AGCATACAAT CAACTCCAAG NTCGGAATTT TAATTACTTC ATGGCCTACT TGATGCAGGC 480
TGGAATGTTA TCCCTGGGGT GTGCTTGGAC CCCACCTGCT TTCTTTCTCT CCTGCCCTC 540
CCCTACTCTC ACTGTAATTT ATGGACCCTG CCCGCCTGCG TGTGTGTGT ATGTCCTGTG 600
CCTTTTCTCA CTATTGTTG GGTGTGGGAG GGGGTGGTTT TTTACTGAAA AGGGGGGTAC 660
ACCTATAGCT TTCTTGATGT TCAATCAATC AGTCACTGTG TCCCAGACAT ATTCAATAAA 720
CACAGATTGG TACCATCTCG AG 742

```

## (2) INFORMATION FOR SEQ ID NO:312:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:312:

```

GCGATTGAAT TCTAGACCCG CCCCAGGAGC CTCCAGCTGC CTAACCAGTG CCATTCTTTC 60
ACAACACGAT TTTCTACAAA TCTACAGCAC AACCGAGTTT GTAACCCGTG GGTTAGTATG 120
AGGACCGGGT TCGTGACTC TCTGTATCTC CTCTTAAGCT TCGTCCAGGG TTCTTTATTT 180
TTGTCTGCTG CCAATGTCGT CTCGCATGCC TGCACCCTCG CATGCACGCT GCCCGCATGC 240
CACGTGCCAC GCTGTAGCCA CATCCTCGAG 270

```

## (2) INFORMATION FOR SEQ ID NO:313:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:313:

```

GAATTGCGCC TTCATGGCCT AGTTGATGTC CTCTCATATT TTGTTGTTTA AATACGCAGT 60
GTGGTGGTTG TTATTAGGA CTGCCTCTGC TCTGACAGAT GTGTCTACTC TACAGAGAGA 120
GAGAGAGACT GTGTCTATTG TCCCACCAGG CTGTCCAGAT CCAAACCTCA ATGACCTTTC 180
TGCACTCTGC CTGGCTATTG GTTACAGTTT ACATTCTACC TTCTCCCAAG GTATTGAGGG 240
AGGCTTGCAT GCAATTCTCG AG 262

```

## (2) INFORMATION FOR SEQ ID NO:314:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:314:

```

GAATTCTAGA CCTGCCTCTC CTGACACGGG CCACCAAACC CCTTACCTGG TTCCTTGCTG 60

```

```

TAAAACTTCA CCAAATGAAG CCAGAGTTGA TCATGACCCT CTCGTGCTCG AATCCCTTCT      120
GGGCTCCCCT CTGCCCCCTG CAAAGCCCAC ATGATACCAC AGAGAAGACC TGTCCCCTGC      180
AGGCCAGCTG CTTCAGCCTC TTCCCTCACA CACATCGTCC CGCACACGGC AGCCACCATG      240
GACTCAACAT CCCCACACA CGGTGCTGCC CTCTGCATGC ACCGACCCCC TGCCCCCTCC      300
ACCAGCTCGA G                                                                311

```

## (2) INFORMATION FOR SEQ ID NO:315:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 232 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:315:

```

GAATTCGGCC TTCATGGCCT ACCTAGGTGC TTTTAAAT ATTCAGACAA ATATCTATCT      60
TACATTGATT AAACCCGTGT AAAATCATTT GCAGTATCTA CATCGAATGT CAAAAAAGTA      120
TACTTATTTT TGTTCATAC TTATGTACAA TTTTTCCTT CTCAGGCTT TTTCATTTAC      180
CTTTTGAAGA AAGCACTTAC TCTCCCTTC CCTATCACC CATCCCCTCG AG                232

```

## (2) INFORMATION FOR SEQ ID NO:316:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 205 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:316:

```

GAATTCGGCC TTCATGGCCT ACAGTTGTTT ATACTTCCTT TACAAATATA AAGATAGCTG      60
TTTAGGATAT TTTGTTACAT TTTTGTAAT TTTTGAAATG CTAGTAATGT GTTTTCACCA      120
GCAAGTATT GTTGCAAACT TAATGTCATT TTCCTTAAGA TGGTTACAGC TATGTAACCT      180
GTATTATTCT GGACGGACAC TCGAG                                              205

```

## (2) INFORMATION FOR SEQ ID NO:317:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:317:

```

GAATTCGGCC TTCATGGCCT AGGGCTTGTC TTTTTCATTG TTGAGTTGCA GGAGTTCCTT      60
ACATATTCTG GATACTAGAC CTCATCAGA TATGGTTTTA AAATACTTTC TCTCATTCTT      120
TTCATTTTCA AGTATCCCTT TGATGCACAC ACCCAAAAAA GCAAATAGTG TCCAATTGCA      180
TTCTTTGATG AAGAAGAATA CAAGCAGTAA GTCAATTACA GCCTATTTTT TTCTTTTCTT      240
TCTTTCTCTT TCTCTCTCTC TCTTTCTTTC TTTGAGGCAG GTAGGCCATG AAGGCCGAA      299

```

## (2) INFORMATION FOR SEQ ID NO:318:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 95 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:318:

```
GAATTCTAGA CCTGCCTCGA GCTCCAGCTG CCAACACCCT TGGACACAAT ATTCCAGTCT    60
CCACTGCCCCA TCTCATGTGG TTCAGGTTCC TCGAG                                95
```

(2) INFORMATION FOR SEQ ID NO:319:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 109 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:319:

```
GATGCTTGGC TCACTCCCCG CTACTGGCCC CCAGACTTTT CCACCCAGG AAATGTCTCC    60
CCTGCCTGCA GCTTCAGCGA AAGCCAGGA GGCAGGCCAA TCACTTGAG                109
```

(2) INFORMATION FOR SEQ ID NO:320:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 253 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:320:

```
GAATTCGGCC TTCATGGCCT ACACATTTCT GTACCTGGAA AAAAAATGTA TCTTATTTT    60
GATAATGGCT CTTAAATCTT TAAACACACA CACAAAATCG TTCTTTACTT TCATTTTGAT    120
TCTTTTAAAT CTGTCTAGTT GTAAGTCTAA TATGATGCAT TTTAAGATGG AGTCCCTCCC    180
TCCTACTTCC CTCACTCCCT TTCTCCTTTG CTTATTTTTC CTACCTTCCC TTCCTCTTGT    240
CTCCCCACTC GAG                                253
```

(2) INFORMATION FOR SEQ ID NO:321:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 334 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:321:

```

GAATTCGGCC TTCATGGCCT AGGTTGTAAG TGATTTTATT TTTTCTTTTC TATTTTCCAG      60
TGTTTCTGTA ATGCTTTCAT ATTTCTTTTG GTAGTTAGAA AATAAAGGCT AATTTTAA      120
AAGAATATCA TAGTCTAAAA AATTAAAGGA TGCATAGAGT TCCCTCTTGA CTATGTGACA      180
TCTAAACTGA ATGAACTGTC TGCGTGGCAC AGTGGAACAG CGCAGTCTCA GGATTCTGAC      240
AGATTTTGG ATCCCAGCTC TACCACTAAC CTTGGGCAGG ATTTTAGTCC CTCTGAGACC      300
TGCTTTCTCG ATTGAATTCT AGACCTGCCT CGAG      334

```

## (2) INFORMATION FOR SEQ ID NO:322:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:322:

```

GAATTCGGCC TTCACCTAAA TACTCCTCCT TTTGTATCAT TCAGCCTTTT GTTTTAGTTT      60
GGTAAGTTTT AAGAAATTC AGCAGCAAAG TTGTTATTCA GTGGGCACGA TGGACTCCAA      120
ATGCCTCAAG TTATGTATAC CTGTGGAGGT CACGTACTTC CAAATTGTTT TCTTCTCAT      180
CTTCTCCCTT TACCTGCACG CCCAGGTGCG CCAGCCGGGC CTCGAG      226

```

## (2) INFORMATION FOR SEQ ID NO:323:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 164 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:323:

```

GAATTAAAT AAACAAAAGG CAGCCAAGGA TGAAAGGATT TAGTTCTAAG ATGTTTCACA      60
GTTGTGATTT GTTTATTTTA ATCCTTAGTA GTAAATTAGT ACTAGAAGGA TCAGGTATAT      120
CTTCCTTAAT TCTTCCCAGG GGAGAGAAAG TCCCATTTCT CGAG      164

```

## (2) INFORMATION FOR SEQ ID NO:324:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:324:

```

GAATTCGGCC TTCATGGCCT AAGCCTATGT TGATCTTGAA CTCCTGGGCT CAANCCNTCC      60
TCCTGTCTCG GCCTCCCAA TTGCTGGAAT TATAAGCACA TTACACAGTG CCCAGTCTAC      120
CTACATTTTG ACAGACATAT AATATTCCAT GGCATGGTTA CATTATTCAG TTAAGAATGT      180
TCCCGGTTTT CTCTAAGATA ATGCTGCCA TCTGTGTCTC ACTCTGGACA TGTAGAGTAC      240
CTGCAAAGAC TTGGACTGCT TGAGCAGAGG GCCTGCTTTT GTTTTTTGTT CTTCTGCCT      300
GTTGTAACTT GATGCTGCCA AATGATCTC TTAAATGATT GTACCACCTT CCCTGCCACC      360
ACCAGATTTT AAGGATTCTC TGTACCTCCC AACACATGAT GACATCATAC ATGAAAAGTT      420

```



TTGCCTGCCT GATGGAATAA TTGAGTCAAG AAATAGGATG CTAATGGCAT CTTCGCTTAC 480  
CCGGTCTCCT CGAG 494

## (2) INFORMATION FOR SEQ ID NO:325:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:325:

GAATTCGGCC TTCATGGCCT AGTTGGGTGT TGAGCTTGAA CGCTTTCTTA ATTGGTGGCT 60  
GCTTTTAGGC CTACTATGGG TGTTAAATTT TTTACTCTCT CTACAAGGTT TTTTCCTAGT 120  
GTCCAAAGAG CTGTTCTCTT TTGGACTAAC AGTTGTCCTG ATGAATAATT TCATTTTCCT 180  
CAAGTTTATG ACACTCGGAA CGTCAAGAAC TGGAGGTTTG TGCAATTTGA GACCGGTCGG 240  
CACTGTGCAG AGATCAGAGT ACTAAGAGAC AGAGATTAAA ATGGCTATCC TCGAG 295

## (2) INFORMATION FOR SEQ ID NO:326:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:326:

GAATTCGGCC TTCATGGCCT ACAAGGATAG AATTCATGCC ACCTATATGT ACTTAGCAGG 60  
GAGTATTGGT TTAACAGCTT TGTCTGCCAT AGCAATCAGC AGAACGCCTG TTCTCATGAA 120  
CTTCATGATG AGAGGCTCTT GGGTGACAAAT TGGTGTGACC TTTGCAGCCA TGGTTGGAGC 180  
TGGAATGCTG GTACGATCAA TACCATATGA CCAGAGCCCA GGCCCAAAGC ATCTTGCTTG 240  
GTTGCTACAT TCTGGTGTGA TGGGTGCAGT GGTGGCTCCT CTGACAATAT TAGGGGGTCC 300  
TCTTCTCATC AGAGCTGCAT GGTACACAGC TGGCATTGTG GGAGGCCTCT CCACTGTGGC 360  
CATGTGTGCG CCCAGTGAAA AGTTTCTGAA CATGGGTGCA CCCCAGGGAG TGCTCGAG 418

## (2) INFORMATION FOR SEQ ID NO:327:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 588 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:327:

GAATTCGGCC TTCATGGCCT ACAGACATCT AATCGGAATC TTGCTCTTGT TGCCCAGGCT 60  
GGAGTGTAAT GGCACAATCT CGGCTTACTG CAACCTCTGC CTCCTGGATT CAAGTGATTG 120  
TCCTGCCTCA GCCTCCCAAG TANCTGGGAT TACAGCCCTG AAAACCACTC GCTTGCAGAG 180  
CGCTGGATCA GCAATGCCTA CTAGTTCTTC ATTCAAACAC CGGATTAAAG AGCAGGAAGA 240  
CTACATCCGA GATTGGACTG CTCATCGAGA AGAGATAGCC AGGATCAGCC AAGATCTTGC 300  
TCTCATTGCT CGGGAGATCA ACGATGTAGC AGGAGAGATA GATTCACTGA CTTCATCAGG 360

CACTGCCCCCT	AGTACCACAG	TAAGCACTGC	TGCCACCACC	CCTGGCTCTG	CCATAGACAC	420
TAGAGAAGAG	TTGGTTGATC	GTGTTTTTGA	TGAAAGCTCA	ACTTCCAAAA	GATTCTCTCA	480
TTAGTTCATT	CCAAAACACC	AGAAGGAAAC	AACGGTCGAT	CTGGTGATCC	AAGACCTCAA	540
GCAGCAGAGC	CTCCCGATCA	CTTAACAATT	ACAATGCGGG	AACTCGAG		588

## (2) INFORMATION FOR SEQ ID NO:328:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:328:

GAATTCGGCC	TTCATGGCCT	ACGACTGGGG	GAAATGTCTA	TTCTCCTGTG	TATCTCTGGG	60
CTTTTCTTGT	TTTTGGCTGC	CTCCTGCTCA	GTTCCTCTCT	TTAGGTATTT	AGTAAAGCGT	120
TCATGTAATG	TCATTCTCTGA	GGACCCAAAG	TGATGCTCTT	TAACATGGTG	AACAATGGTC	180
ACTATATGTT	GGGCAAACAG	TTCTGAGGGG	CTACGCTGAG	ACTGAGCTGA	TTGTATGTGC	240
TGGAAAATGG	AACGAAACTC	CTGTTCCCTT	TTGTTGCTAT	GGACTAGATC	TCGGCAAAGC	300
TTGCGTTCCT	GAGCCAATAA	GCCACTGGGT	CGTGCGAGGT	CCTCATCAAA	AGAGTCCATC	360
CGGACATTGA	CCTGTGCCTC	TCGAG				385

## (2) INFORMATION FOR SEQ ID NO:329:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:329:

GAATTCGGCC	TTCATGGCCT	AGCAGTTCAC	CACTGCAAAA	CCACGGGGCT	GCGTGAGGT	60
ATTCATGGGA	CACCGAGTGG	TATCACTAGC	AGCGGACTCT	GCATGCTTAC	TTAGAGCATA	120
AAAGGATAGC	ACCCTTGGCC	ATTGCCTGAC	ATGAACTCAG	TTTGGAATTT	GCAGAGGTGT	180
GGAGAGCCAT	GGATGGGTTT	TATAATTTAT	TCTAATGTAA	TCTCTGTGCT	AAAGGCTGTT	240
TGAAAAAAT	AATGAAGTTG	ATGTTGCTTA	AGTTATATGC	AAATGTAAAC	TGGTCTTCCT	300
TCAAGATGTT	TGGAATGGAA	TGAATGCCCT	TCCCCTGGGT	ACCTCCCAAT	ACCTACCCTC	360
AAAAGAGCTC	CAGTAAGGCT	TCCTTATCTT	TCCTTGCCCT	GCTTCCTACA	CTGCTGCTGC	420
AGGTGTCTCT	GGGTGATTGT	GGGGGAAACC	ACTGTGGTTA	AGCACCAACA	CCAAGACTCG	480
AG						482

## (2) INFORMATION FOR SEQ ID NO:330:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:330:

GAATTCGGCC	TTCATGGCCT	AAGGCCTTGG	TGCCCTGTGG	GTGGACTCTG	GGGAGGCCAG	60
GGGCCCAAGG	CCACCTTCTA	GGGCCTGAGG	AGCCCTCTGA	GACCTGCACA	CCCACCCCAG	120
GGAGCGCCCC	TCCCTCCACC	TCTGTGCCCC	CCCAGTGACT	CTCGAACCTC	TGTCTGTTTT	180
GCAGATTCAT	CCGGAAGGGC	CGCCAGCCAG	TGGATTTCCC	GGGCCCTCAG	CCCTCTGGAG	240
TGTACGAGTT	TTGGAGAAAC	CTCTTCCTCT	GTATATGCTT	TTGACTTTCC	TGGACTGATG	300
TAAAAATACT	CTTTCTTTTG	ACCTGTTTAT	TTTTAAGACA	CGACGTGATT	GTGTCAGCTT	360
ATATTTTATT	GCTGAAGTAA	ATTTTCAAAT	GTTTTATTAG	TTTTTTTGGG	TCTTTGTCTG	420
CTCATTTTGG	AGTTTTTGTA	ATTTTGATAG	GTGTTCTTTT	ATGCTTTGTA	TTGTTTTCTT	480
AATGACTTTT	ACCTTAGTTT	TTAACAAACC	CATAGTACAG	TGTACCCTCG	AG	532

## (2) INFORMATION FOR SEQ ID NO:331:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:331:

GAATTCGGCC	TTCATGGCCT	ACATTTTGG	AAAAAAAAAA	ATCTACTTTG	TGTATGTGTG	60
GGGTGTGGGG	TGTGAGAGAT	ACATTCCTTT	TTNGTGTCTA	AATCTCACAG	TCCACATATG	120
ACTTTCCCCA	CTTGAGAATT	CTCTCTCATC	TGTGTGGCTC	CCTGCATTCT	ATAAAAAATAT	180
AAATAAATAA	AATTTTAAAA	AGTATAAAGC	CGGTGCCATG	AGACCCTTGG	GTTGGGGCAA	240
GCCTGTGAAG	TTTGAACCGG	TTAACGCACG	AATACAAGGG	AGTGATTATT	ACAAGGCCAT	300
CCCGCTTAGC	ATCGGGGAAT	CATTTGGGGA	GAGAGATTCA	ATTTCATAAA	GATGATTTTC	360
AAGGGCTGTC	TCGAG					375

## (2) INFORMATION FOR SEQ ID NO:332:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:332:

GAATTCGGCC	TTCATGGCCT	ACACGCGGTC	AACCTCTGCAG	GGCTGATGAT	AAACATGCCT	60
CTTCTCCTAT	TGTCCTTCTC	CTCTCTAAAG	CAAGGTCATT	TCTGTGCTCG	TCAGGCAGTG	120
GCAGGGGTTG	GGAGGAGGAG	AGAGGGAAAC	ACTGTGGTCA	GGCTCTGGGG	AGAGTTGACT	180
ACAGTGTAGC	TCTTGGATTA	TTTATGAATA	TTGCCCTCAG	ATTTATTTTC	ACTCTGCTCC	240
TTCCATTCAT	ATTCCCAGAG	ACAACCAAGA	GCCGACTGTA	GAAAAAGACT	TCCAGACACC	300
TAGAATATAT	ATCAATAGAC	ACTGTTTAAA	AGGGGAGACT	CGAG		344

## (2) INFORMATION FOR SEQ ID NO:333:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:333:

```

TGGCCTAAAG GGGGTGGGTA CTCGGGTGGG GTAAGGTCAG AAGGTCCCTG TGCAGGGAGG      60
GACTGGTCCC TTGAGAAGGA ACAGAGGGCA AATCCTGAAG AGTCCTGGAG GCCCAATGTA      120
GACAGCAGAA GCTGGGAGCT GACCTAGGAG TGATCGGGGG CCTGATCCAG ACAGGACAGA      180
CACAGGCTGA CACCGGAGAG TCCAGGTGC CAACATGAAC AGTTAAGGCA GGGGCTGACC      240
CCAAAGAAAT CAGGGGCCCC CAGCTGACCC CGGAGGGTCC CAGGTGCCGA CCTAGACAGC      300
AAAGGCAGGG CTGACCCAG AGGGTCCCGA GCCGACCCAG ACGACACAGG CAGGGCTGAT      360
CCCGGAGGGC CCCGCCCGA CCCGGACAGG CAGTGAAGGC ACAGGCAGGG CTGACACTCG      420
AG

```

## (2) INFORMATION FOR SEQ ID NO:334:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 329 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:334:

```

GGGAACGAAA GATGGCGGCG GAAACGCTGC TGTCCAGTTT GTTAGGACTG CTGCTTCTGG      60
GACTCCTGTT ACCCGCAAGT CTGACCGGCG GTGTCCGGAG CCTGAACCTG GAGGAGCTGA      120
GTGAGATGCG TTATGGGATC GAGATCCTGC CGTTGCCTGT CATGGGAGGG CAGAGCCAAT      180
CTTCGGACGT GGTGATTGTC TCCTCTAAGT ACAAACAGCG CTATGAGTGT CGCCTGCCAG      240
CTGGAGCTAT TCACTTCCAG CGTGAAAGGG AGGAGGAAAC ACCTGCTTAC CAAGGGCCTG      300
GGATCCCTGA GTTGTGAGC CACCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:335:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 377 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:335:

```

GAATTCGGCC TTCATGGCCT AAAACAGATA ACGCTATAGA GAAAACACTG TTTACTGAAC      60
AGTGCTTTGA AACCACGAGG GTGATCAGAG CCCCATTTCC CTTTCTAGAG ATAAACCTGT      120
CTCCCTTCCT GCAGAGCTAG CTCCTCCTAT TGCTTCTGGT TGTGTTTTGT CTTCACTCTG      180
CTTCCTGCCA GTGCAGCAGC TCCTGCTAGA TCTTGACATC CTAGTGGCCA GATCCCAGGG      240
GCGGTGCTGG TCCTATCCGA GCTCTCTGCC TCATCTCCCA TTCCTTTTTT CCACACTCAG      300
TGTGTATTCT CTTGGATTTC CATACCCTGT TCCTCCTACC ATCCACCTCT CTACCTCATC      360
TCCCGACCTG CCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:336:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 356 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:336:

```

GAATTCGGCC TTCATGGCCT AGCAGGTCAG GAGCCCGGGG AAGGCCCAGA GGTACTCCAA      60
AGGGGGCCCG CTGGTATCTG AAGGCCCTT GCAGTTAGTG TGTTGTTGAG CTGTGGGCAT      120
GAACATGCCA CAGGCAGACA CTGTTTAGCC AGGGTTTTAA GAAACACGGA GGGTCCTGTG      180
GATCTGGAGT TCATTTGTCA GGACAGGGAT GGGGACCCCT CTGAAGTATT CACTGTGGGC      240
TGAGGGGTGC TGGCCACACA ACCTCTGTGG GAGGCATCTC TTGCAGTGAA GCTGTTGGTC      300
CTCAGTTCAG TGCCCACTGA GGGTAACCAG GCCCCAGCTC TGCACCCCA CTCGAG      356

```

## (2) INFORMATION FOR SEQ ID NO:337:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:337:

```

GAATTCTAGA CCTGCCGCGAG CACAATCCCG TGGACAGAGC TTACTCCATC TAACTCGTTT      60
TCAAGTGCAT GATTTTCACT TTCACCTTTC CTTTTTCCTT ATTATGTTGC TTAAGTTGTA      120
CAGTGGCAAC TGAAATGCAT TTCAGAAATA GGAGGTTTCG TCCAGCACCC TCTGCAGCCT      180
TGGTGCCTGT AGCTCTGGAC TTCCCTGGGC CTTTCCCTGT GGGAGGGCCC TGTTAGACCAC      240
ATCAGGGTGG GGTGGGGGTC ACTTGGCAAA AAGGGCCGAG GTCTGGTGAT GTGGTTCCCA      300
GGATCTGGAA CCTCTCCAC CCCTCCTGCA GTTGGACTGA ATTCTTCCCT TTCATCCGAA      360
GAAACCCACT TGCTGTTTCC AGCCAACTCG AG                                     392

```

## (2) INFORMATION FOR SEQ ID NO:338:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:338:

```

GCAAGATGGC GACCGAGACG GTGGAGCTCC ATAAGCTAAA GCTTGCCGAA CTAAAGCAAG      60
AATGTCTTGC TCGTGGTTTG GAGACCAAGG GAATAAGCA AGATCTTATC CACAGACTCC      120
AGGCATATCT TGAAGAACAT GCTGAAGAGG AGGCAAATGA AGAAGATGTA CTGGGAGATG      180
AAACAGAGGA AGAAGAAACA AAGCCCATTG AGCTCCCTGT CAAAGAGGAA GAACCCCTG      240
AAAAAAGTGT TGATGTGGCT CTCGAG                                     266

```

## (2) INFORMATION FOR SEQ ID NO:339:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:339:

```

GAATTCGGCC TTCATGGCCT AAACAATGAA TAAAGCCAAG CCAGTTCCTG CCCCCGTGGA      60

```

GCTTGTAGTC	AAGACATTGA	ACAAGTGATC	AGAAAGATGT	TGACTGCTGC	AGCAGAGGGT	120
TGCAAGCTGC	TCATGAGTAT	ATAACAAGTA	GCCCTAACCA	AAGCATTCTC	TCCCTTG GTT	180
TAATGTCCAC	CCATTGAGGT	GACTGCTAAA	TACTAATCCA	TGACTCTATC	CCTTGGCATT	240
CAAAC TCACA	CATCCACTTA	CCTGCCTCTC	CAACCTCCCT	GCCTCGAG		288

## (2) INFORMATION FOR SEQ ID NO:340:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:340:

GAATTCGGCC	TTCATGGCCT	AGTCTCTGCC	ATGTTCTAAA	CTGAAAACCT	CCTAGTCAAC	60
TTCACACTTT	ATTCCTTGAT	CCTCAATTGG	TTCCCATGTC	CCGTTAGTGT	TTCTTGTAAG	120
CCTCTGCCAC	CACCGCAGAT	CGAACTCTAA	TCACATCTCA	CCTGAATTAT	GGAAAAGTCA	180
CCTCAATTCT	CTCACCCATC	CCAGCCTCCA	CTATGGATTA	ATATGCCTAA	AGCAGAGCTG	240
ACCACAACGG	TGAGAAGAAT	CTGAGAGGGA	AGCAGCAGCA	AACACAAGAG	TCACTGGACA	300
TGCATGCCTC	GAG					313

## (2) INFORMATION FOR SEQ ID NO:341:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:341:

GAATTCGGCC	TTCATGGCCT	AAGAAAAAAG	GATAGACAAA	TAGTATTTTT	GTGATTTTAC	60
AGTAGCTTAA	AACTATAGGA	TTTTTTTTC	CCATTACTTT	GCAACAACCTG	ATACTTTTGA	120
CCAGTTCTCT	TTCTTAAGCA	TTTCTCTCCT	TGAGCTATTA	CCCAAATTGT	CCTAGTTCTT	180
CTCTGCTTGT	CCCTCAGCTA	TACACAGTCA	CTGAGGCTCT	GTGCTTGGCT	TCTGTTCCCTC	240
TCTCTCATA	GGGATTCCTC	ATGTTGGAGT	TCATCAAGCT	CGAG		284

## (2) INFORMATION FOR SEQ ID NO:342:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:342:

GAATTCGGCC	TTCATGGCCT	ACCACGATAG	ACCAGCTGTA	GCTCATTCCA	GCCTGTACCT	60
TGGATGAGGG	GTAGCCTCCC	ACTGCATCCC	ATCCTGAATA	TCCTTTGCAA	CTCCCCAAGA	120
GTGCTTATTT	AAGTGTTAAT	ACTTTTAAGA	GAAGTGCAGC	GATTAATTGT	GGATCTCCCC	180
CTGCCCATTG	CCTGCTTGAG	GGGCACCACT	ACTCCAGCCC	AGAAGGAAAG	GGGGGCAGCT	240
CAGTGGCCCC	AAGAGGGAGC	TGATATCATG	AGGATAACAT	TGGCGGGAGG	GGAGTTAACT	300

GGCAGGGCAC TCGAG

315

## (2) INFORMATION FOR SEQ ID NO:343:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:343:

GAATTCGGCC TTCATGGCCT AAAGATGTTA GATATTACAA TTTGACTGAA GAACAGAAGG	60
CGATCAAGGC CAAGTATCCG CCAGTCAATA GGAAGTACGA GTGTGAGAGA TGAATTACAG	120
TCTCTTCTGT TTCACCTTTT GGATGAATGG CTTTATAAGT TCAAGTCTGA TGAATCTTC	180
ATACCCCGGG TGGGAGAAG AATTTTCATT GTCCAAGCAC CCTCAGGGAA CAGAAGTCAA	240
AGCAATAACA TATTAGCAA TGCAGGTCTA TAATGAAGAG AACCCG	286

## (2) INFORMATION FOR SEQ ID NO:344:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 545 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:344:

GAATTCGGCC TTCATGGCCT ACCTCTGTGA AAATTTAATT TTTTATATCC TGATTAATAT	60
ATTGTGACTT TAGGCCCAT TTTTCATGTGC TTCACCTTGA TAGAGTTAAT CCATAAAATT	120
GCTCTTTACT TTAGCTTATC AAATGAAGTA TTATTTGTG GACTGGAGGC CAAAAAGTCA	180
ATGTGAGCTT CTCACAGGTT TTTAAAGCTC CACTAAAAAT AATTATCCAC TTGTCTTTAC	240
TTTTGTTGAC CAGAATAGTT GGTAAGCTG CCAGAGCCTG TACTTACCTG CAAAAACAA	300
TTAAATCTGG TTAATGCCTG AAACCAAATC TCTCAGTCTC AAGTGTATA CTATCCAAGT	360
TTAAATGGA AAGGTAACT GTGGAGTAAT GAAATTTTGG TTTTACTGTA CCTTTTGCTA	420
TCAAGATAAT ATTCATGTTT GAAATCTTGT CTTTATTTGG AATTTAGTTA CTGTCTGCTT	480
TTAACCTTTG CTTTCCTAAA GAAAGTTTGA GATCCAGAGA GTTCAAGGA TCGGGGAGTC	540
TCGAG	545

## (2) INFORMATION FOR SEQ ID NO:345:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:345:

GAATTCGGCC TTCATGGCCT ACAATAAGTG TGTATACTT GCTTTGGTGA TTGCAATCAG	60
CATGGGATTT GGCCATTTCT ATGGCACAAT TCAGATTCAG AAGCGTCAAC AGTTAGTCAG	120
AAAGATACAT GAAGATGAAT TGAATGATAT GAAGGATTAT CTTTCCCAGT GTCAACAGGA	180
ACAAGAATCT TTTATAGATT ATAAGTCATT GAAAGAAAAT CTTGCAAGGT GTTGGACACT	240

TACTGAAGCA GAGAAGATGT CCTTTGAAAC TCAGAAAACG AACCTTGCTA CAGAACTCGA 300  
G 301

(2) INFORMATION FOR SEQ ID NO:346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:346:

GAATTCGGCC TTCATGGCCT ACACATTTTG ACAGCTTCCT TTCAGGTTTC TTGAGCTCTC 60  
AGAAAAATTA GAAGGAAGTG GGCTGGGGAT ATAGAGAGAG TCCAACTAC CAACTAATGA 120  
ATGAATCTGA AGGAGACACA GAAGGGCAAG TAGAGTTTAG AGTTTGAGAG TGCAGGAAAG 180  
TTTTGAAATG GTCAGAACTG CCAGAGTAAT TTCTGAGATC TTAATAAGCA CTCTCCACC 240  
GTTTGCCTTA AAGATACCCC TTCCCCCAA TTGAAACATC ACAAATCTGC AGAGCTCTTT 300  
AATCAGGTGT GTTATACACA ATGAATTTAA TTCTCTTATT GCCCTGGAAG AAAGATAAAC 360  
CAGATGTGGC CTTGCCCCCT TTTCAGTAAG TATTTGTTAG ATCTTCATTA CATTTTAGGC 420  
CTCTAGGCC ATGAAGGCCG GCCTTCA 447

(2) INFORMATION FOR SEQ ID NO:347:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:347:

GAATTCGGCC TTCATGGCCT AAAATTCGGC TGATTTCCCC CTTGGCTAGC CCAGCTGACG 60  
GAGTCAAGAG CAAACCAAGA AAAACTACAG AAGTGACAGG AACAGGTCTT GGAAGGAACA 120  
GAAAGAACT GTCTTCCTAT CCAAAGCAAA TTTTACGCAG AAAAATGCTG TAATTTCTTG 180  
GGAAGATTTT AATGTACACC TATTGTAAA GTCATCAGAA TAGTGTGGAT TATTAAATAT 240  
CTAGTTTGA AGAAAATAAT TTATATAAAT TATTGTAAAT TTTTATGTAA ACTCGAG 297

(2) INFORMATION FOR SEQ ID NO:348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:348:

GAATTCGGCC TTCATGGCCT AGAATAAAAC AAAGCCTTTT CTGCCTTTTA CATTCAGTTC 60  
AGTAACCGTC AACACCCAC CCATATACTC CCATACCAGT AGGTGTAATT TTCAAACCTC 120  
TCGCATACTT TTAATTACTA GTTTAATTAT TTGCCTTCTC ACTGAGTCTA TAATCTCACT 180  
TAGGGTAAGA ACAGAACTCA ATTACAGATG CTCAGTAAAC ACTGGAAGGC CGCGGCTCGA 240  
G 241



## (2) INFORMATION FOR SEQ ID NO:349:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 172 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:349:

GAATTCGGCC TTCATGGCCT AGGGCTGCCC AAGATTGTGA AAGGTAAGTA GTATCTTTAT	60
TTGGGGGTAA CTTAATTATA GATAAAAGAT GGTCCAATAC TGGAAACTGT TCGTTTCTTC	120
CCTTGGATCT AGTCTTCTTC TGCTTTATAT AGAATCCCAC CATCATCTCG AG	172

## (2) INFORMATION FOR SEQ ID NO:350:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:350:

GAATTCGGCC TTCATGGCCT ACACGTGACA GCCTTTCACT TTTCAGATCA CCTTCCTCAC	60
ACTGATGGTC TCATACAACA TCATTTTGAA TGTCCTCAGC TCTCTGCACC ACCCACCCTAA	120
CTCCACTCTG GGCCACCGCT GGTGTATCCA AGATCAGGAC ACCAGTCCCT GGGCACCAGG	180
GAGTATGCTG GCCACTGAAG CAGCTTCGTT TTTCCGGCAC CCATGTTGTA AAATCGACTC	240
CCCCAAACTC GAG	253

## (2) INFORMATION FOR SEQ ID NO:351:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:351:

GAATTCGGCC TTCATGGCCT AGAAAGTTTA AAGATTAGCG TACTGATTAT GATGGGATTT	60
TTACTGAAAA TTAGTTTTGT CAGGCTGCTT GCTTGTCTGT GTATTTTCTA TTCTAATTTA	120
GTTTTTATTT TTATCAAAGC TGTATTTACT TATAATGTAA AAAGTCAATT AGTTTTCCAA	180
GGCTTATTAT GGAAACAGT AGTTCCCCAG GCTCCCATCC CTATGTCCAA CAAACTCGAG	240

## (2) INFORMATION FOR SEQ ID NO:352:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:352:

```
GAATTCGGCC TTCATGGCCT AGACCTGCCT CTAAGCCTTT GATTATTCAG CTGCCACTGC      60
CTACAGGCCT TCTCCCATAT TCCTTCCTTC TTGCTAAGTC TGACTTAAAC TAGGCTTAGG      120
CACCAACTCC TATAGGAAGC CTTCTTGAA CCTGGCCCTC TACTTTTCAC TCACTGACTA      180
CCACTCAATT AACTGAACGG TGAAAAGTAA CCCACAGCTA CGCATTTCATG CAGACAACAG      240
AATTTTACTA CTTCTTCTCA CTA CTGGTTC ATATTTCTGC AACCAGAAAA TATCATTTCA      300
TCCCTAGTAA CTATGGCTTC CATCTGTTAC TTCC                                334
```

(2) INFORMATION FOR SEQ ID NO:353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 92 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:353:

```
GAATTCGGCC TTCATGGCCT AATAATGACT TGTGTTGTA TTGTAGATAT TGGGCTGTTA      60
ATTGTCAAGT CAGTAGGCCA TGAAGGCCGA AG                                92
```

(2) INFORMATION FOR SEQ ID NO:354:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:354:

```
GAATTCAGTT CCTTATATAT TCTAGTTATT AATCCCTTAT CAGGTGGATA GTTTGCAGAT      60
ATCTTCTCCC ATTCTTTAGG TTGTCTCTTC ACTCTGTTGA TCGTTTCCTT TGCTCTGCAA      120
AAGCTTTGTA GCTTGAGATA ATCCCATTG TCTGTTTTTG CTTTTGTTGC CTATGCTTTT      180
GAGGTCTTAC TCAAAAAATT TTTGCCAGA CCAGTACCCT TGAAGCATG CCCCAATGGT      240
TTTTTTTTTT AGTCATTTC TAGTTCAGGT CTTACTCGAG                        280
```

(2) INFORMATION FOR SEQ ID NO:355:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:355:

```
GAATTCGGCC TCCATGGCCT ACATAGATGG GCACACTCAC ACACAGAAGT GTGCTTGTAC      60
AATCACCACA CACGCACAAA CACACACACA CACTAAAAAT ATAAACACA TGCGTCACAT      120
```

```

GGGCATTTC A GATGATCAGC TCTGTATCTG GTTAAGTCGG TTGCTGGGAT GCACCCTGCA      180
CTAGAGCTGA AAGGAAATTG GACCTCCATG CAGCCCTGAC AGGTTGTGGG CCCGGGCCCT      240
CCCTTTGTGC TTTGTATCTG CAGCTCTTGC GCCTTTTATA AGTCCATCCT AGTCCCTGCT      300
GGATGGCAGG GGGCTGGATG GGGGGCAGGA CTAATACTGA GTGATTGCAG AGTGCTTTAT      360
GAATTCACCT TATTTATCG AAACCCATTG GACTCGAG      398

```

## (2) INFORMATION FOR SEQ ID NO:356:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:356:

```

GTGTCAGAGC AGGCATTTC CAACCTAAGG AAATCTTTGT TTTCAAATAT TAGGGTTTTT      60
TTTTAATTGT GGTAAAGGA TTTGGACAT GCTTTGTAAA TTGTTAGTAA AAGGACCTAT      120
TTTCCACCTG TATTCTAAGT TATTTTTCCT CCTCTTTTGT AATTTTTCAG GTCAGCCCTT      180
CATAAACCCA GATGGGAGTC CAGTTGTGTA TAATCCTCCT ATGACTCAAC AACCAGTTAG      240
ATCCCAAGTG CCTGGACCTC CACAGCCACC TCTGCCAGCC CCACCTCAAC AACCAGCAGC      300
TAATCACATT TTCTCACAGG CGCATCTCGA G      331

```

## (2) INFORMATION FOR SEQ ID NO:357:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:357:

```

GCTGCCTCGA GGTCTCCAAG ACTTTTTCAT CTCGTATCGT TTCGGGATCC GTATCCATAC      60
TTTTATTTTC ACTTCTTCC TCTTCCTCCT CGAACTCCTC GTCGCCATCC TGTCTGCCCCA      120
GCTTCCCGTA GCCATCCTCG CTTCTTTCT CGTGCTCCTT CTCGCTCTCG CCATCCCTCG      180
GCATACTCTC CCTCTTCCTC TCGAG      205

```

## (2) INFORMATION FOR SEQ ID NO:358:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:358:

```

CAAAAGAGAT GGTACCAGCA AGAGATTAAT ACTAAAGAAA TGCAGTCAGA TTTTAAAGAA      60
ACTGGAAGAA GAGCCATTTC TCCCAGGGAG AAGATTCTAG ATGTGATTGA TGACACCATA      120
GAAATGGAGA CAGGTCTGAA AGCAATGGGA AGAGAGATTG GTCTAAGGGA GAAGACGCCA      180
GAGGTGATTG ATGCCACTGA GGAAATAGAC AAAGATTGG AAGAAGCTGG AAGAAGAGAA      240
ATATCCCCAC AGAAAAATGG CCCAGAGGAG GTTAAGCCTC TAGGTGAAGT GGAGACAGAT      300

```

TTGAAAGCAA	CTGGATATGA	GAGTTCCCCA	AGGGAGAAGA	CACCAGAGGT	GA	360
ACTGAGGAAA	TAGACAAAAA	TTTGAAGAA	ACTGGAAGAA	GAAAAATATC	CCCAAGGGAA	420
AATGGCCCAG	AGGAGGTCAA	GCCTGTAGAT	GAAATGGAGA	CAGATTGAA	CGCAACTGGA	480
AGAGAGAGTT	CTCCAAGGGA	GAAGACACCA	GAGGTGATTG	ATGCTACTGA	GGAAATAGAT	540
TTGGAAGAAA	CTGAAAGAGA	AGTATCCCCA	CAGGAAAACT	CGAG		584

## (2) INFORMATION FOR SEQ ID NO:359:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:359:

GAATTCGGCC	TTCATGGCCT	ATGCTTCTG	AATTGGCAAG	ATATTCCAGG	CTTATTTGGC	60
ATTCATCTTA	CTCTAGACCT	ATTATCAACC	ATGTCTCCAA	GGATAAGTAG	ATCCTTTTAA	120
GGGAAAATGG	TATTTTGAAA	GCATAGTGTG	GGATCTGAGG	ATACCTATTC	CTGTCAGGTT	180
GGTTATTGTT	TGTTTTCAGT	GAGTAGATCT	TGGACTTTAT	TAATTTTATT	TATTATTTT	240
AAGAAAAGTA	CATCATGAGT	TATAAGTAAT	AATTCCAAC	CAAATTTTAA	TATTGCTTAA	300
CTTCTTTGAT	TTTATATTTA	TCTTTTACAC	TGAAAAGTCT	CGAG		344

## (2) INFORMATION FOR SEQ ID NO:360:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:360:

GCGGGTGGAC	AAAAATGAAG	CCAATGAAGA	AGGCATGCAC	TGGCCTTTCA	GGTCCTGGCA	60
GTGGCAGCAA	GTCCCCCCA	GCCACCAGG	CCAAGGCTCT	GAGGCGGCGA	GGGGCTGGGG	120
AGGGTGACAA	GCCAGAGGAG	GAGGATGACG	AGGCACAGCA	GCCGCAACCA	CAGTCCGGGC	180
CCGAAGAGGC	TGAGGAAGGG	GAGGAGGAGG	AGGCTGAGCG	GGGCCCTGGG	GCTGAAGGTC	240
CTCCACTGGA	GCTGCACCCT	GCGACCCGG	CTCCAGGCC	AGCAGAGGAC	CCCAAAGGGG	300
ATGGGGAGGC	AGGCCGCTGG	GAGCCCTCAC	TCAGCCGCAA	GACAGCCCCG	TTCAGTCTCG	360
AG						362

## (2) INFORMATION FOR SEQ ID NO:361:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:361:

GCACCACCTC	TTGCACTGTG	AGGAGTTTAT	TGATGAATTC	AATGGGCTGC	ACATGTCCAA	60
GGACAAGAGG	ATCAAGTCAG	GGAAGCAGTC	CAGTACCTCC	AAGCTGCTGC	GTGACAGTCG	120

```

AGGCCCGTCG GTTGAGAAAC TGTCCACAG ACCTTCAGAT CCTGGAAAGA GCAAGGGGAC 180
CTCCCATAAA CGGAAGCGAA TTAACCTCC CCTGGCCAAG CCAAAAAAAG GGTATTGAG 240
CAAGCCCTCT TCAGGAGGTG ACAGGGCCAC CAAGACGGTG TCTTACAGGA CTACCCCGAG 300
TGGTTTGCAA ATAATGCCCC TGAAAAAGTC TCAGAACGGG ATGGAAATG GGGACGCCGG 360
CTCTGTAAGG ACCTCGAG 378

```

## (2) INFORMATION FOR SEQ ID NO:362:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:362:

```

GATTGTATTG AAAGTCAGAC ATAGGTGTGG AACCAGTTAT GGGAGTGAGG ATAAGTCTAG 60
ATTTGGGAAT CAGTCGCAGA GAGGTGGACG ATGAAAGTCT GAGAAGAAAG GATCTTGCTA 120
ATGGAGTGAA CTCAGAGCTT GATAAAGGGA GGATGAGTGG AAATGGAGCT CAACGCTGTG 180
CCTTGGGAAA TACCTCTGTG GATTGGTGGG AGCACAGTGA GAAATCAAG AAAGACACAG 240
ACAATGGAAT AACCAGAGAA CTCGAG 266

```

## (2) INFORMATION FOR SEQ ID NO:363:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:363:

```

GAATTCTAGA CCTGCCTCGA GCATTGCCCC CGGCCTAAGA AGCTCTCTTA TCTTGCATCT 60
TGGGCTGGAC TCCTACAACA GCCACAACCT CCGTGCTGGT CTCCAGCTT CTAGCCTTCC 120
CCCATCTCCT GTCGTTTTTC ACACAGCAGC CAGAAGGATC CTTTAAAAAC AGAGGTTGAT 180
CCTGTCGTTT CTCAAAATCC TCCAATGCTT TTCCTACTGC ACTCAGAGTA AAAGCCAGTC 240
TCTGCCTTAG ATGCTCTGGG ATCCTGTACC CTCTTTGGTC TCATGTCCTA CAATCTGCAT 300
TCTGGCCATA ATGGTCTTCT CTGCTGTTCC TTGAACATT CAGGAACATT CCCCCATAC 360
CTCGAG 367

```

## (2) INFORMATION FOR SEQ ID NO:364:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:364:

```

GAATTCGGCC TTCATGGCCT ACTGGGTTCT GAGAAGCAGT GGCCCGAGCT GAAGCATCCA 60
GACAATGAGT GTTCAGAAGC TGCCAGATTC TCACCTAGCC TTAGAAGTAA CACAGCCACA 120
TTCTGTCGGT TACAAACACA TTTCTAAGGC CAGTCCAGAT TCAAACGGAG GGCAATTAGA 180

```

TTTGACCCCT	TGATGAAGGA	GGGCAAGGTT	ACACTGAAAA	ACAGCATAGG	GACTGGGAGA	240
TATTATGATG	TCCATTTTGT	GAAAATCTGC	CACAGACACA	GTGAAGACAG	AGAGCCCTTC	300
TCTCTGATCG	AGGACCTCCA	GAATGATCTG	CTGAGTCACT	CAGGTATGCT	GGACCATTC	360
CACTCACCCC	GGAAAAGCTC	GAG				383

## (2) INFORMATION FOR SEQ ID NO:365:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:365:

GAGGTTTACA	GGTTTAAGCA	TTTGTTTTTA	CAAAAAGGAA	TGGGATATGG	GGGTGGTCAA	60
GTTTTACGGG	TAATAACAAC	ATTCTCTCTA	GATGGCAGGG	GGTAAGTCTG	CCTGTCTCTC	120
ATTGCTGGTA	CCACATAAGG	GATACATTAG	TAAAGTAGGG	AAAGGGTCAT	ATGTGTGGTT	180
GACCTGTTCT	TCAGAGAGGA	ACGTGGGATG	GTATCTGCTG	TGTACCTGTC	TCAGACCAAA	240
CCTGGGGGTG	GACCAAGTCC	CCTTTCTTCT	CAGCCTTCTT	CCACAGCCTG	ACTGTACTGC	300
CACCCGCACC	CATGAGAAGG	AGGTNNTGAA	GGAAGCTTGA	GGACATCCAC	CTCGAG	356

## (2) INFORMATION FOR SEQ ID NO:366:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:366:

GAATTCGGCC	TTCATGGCCT	ACAACCATTG	AAAAAATATA	GACTTAGAAA	ACGAAAGTTC	60
CCCTTAATCA	CAAAGAACCA	CAGTTGACAG	GGTTGATAGA	TGTTTTTTCA	GATTTTTTTT	120
TTCATATGTC	TGCTATCTTT	CCCCACAGGA	ACTGGGTTTT	ATTTTAGGTG	TTGTTTTGCA	180
ACCTCTGTTT	TTCAGTTGCC	AGTTTATCTC	AGACATTGTC	CTATGTCAGT	ACAGGCCCAT	240
CTCGAG						246

## (2) INFORMATION FOR SEQ ID NO:367:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:367:

GAATTCGGCC	TTCATGGCCT	ACAAAAAAC	AACCTTCCAG	TGGCTTCTCA	CTGCTCTGAG	60
AATAAACTCC	AGGCTCTTCC	ATTGCAACCA	ACAGGATCTG	GTGATTCCGAC	CCCAGCCCTT	120
CTTTCCAGGC	CCTCATCACC	TTGATCCTCC	CTTAACCTAT	CCTGCTCCAG	CTGCACTGGC	180
TGCCTTCCTA	TTCCTCCAGC	ATACCAAGAT	TGTTTCTGCC	ACAGGGCCGC	CACTCGAG	238

## (2) INFORMATION FOR SEQ ID NO:368:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:368:

GAATTCGGCC TTCATGGCCT AGTTTTTCT ACTCCTACAA GTGTAAATTG AAAAATCTTT	60
ATATTAAAAA AGTAACTGT TATGAAGCTG CTATGTACTA ATAATACTTT GCTTGCCAAA	120
GTGTTTGGGT TTTGTTGTTG TTTGTTGTT TGTGTTGTTT TGGTTCATGA ACAACAGTGT	180
CTAGAAACCC ATTTTGAAAG TGGAAAATTA TTAAGTCACC TATCACTCGA G	231

## (2) INFORMATION FOR SEQ ID NO:369:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:369:

GAATTCGGCC TTCATGGCCT ACTTGGTCTT CTGCACTTTT GTCTCTGACG TACTTCCTTT	60
CTTCACAAGT GCCATTTACA GAAAGCTGGG CTAAACCAT TCCCAGCTAT TCCTCCTACA	120
GCTTTCCTGA ATTATTTTCA AATACAAAAT TCTGTATCTC CAAGAACTA TTACAGATT	180
AGATTTAAAA ATATGCACTA TTTTCTACCT TGTATGTTT GCTTACTATT TTTTTTTG	240
AGAGGATATG TCTTAAAAAT TGAAATGCAT CAAAAAT	277

## (2) INFORMATION FOR SEQ ID NO:370:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:370:

GAATTCGGCC TTCATGGCCT ACCAAGTCAA AAAATAGAAC AGTTCGGGCA CCCCAGAAGC	60
CCTTTGCCAC GTGGTCACAA CCCTCCCTGT TTCCACCAAC AGTAACATTC TAGTTTTTAC	120
AGTAATTTCT TCCTTGCTTT TCTTTGTAAT TTTACTGCCC TGTGTTTCTT AATATGATTT	180
AGTTTTCCT GGTTTTGCCT TCATATAAAT GAAATCATAC TGAATATATT ATTTTCATTT	240
TTGCCCAATA TTTGTTTGT AAGATTCATC CATCTGTAG CTCCAATGTA TTTATTTTCA	300
TTTTTGATA ATTATATGAT TATGCCACAG TTTGTCACTT CACTCGAG	348

## (2) INFORMATION FOR SEQ ID NO:371:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:371:

GAATTCGGCC	TTCATGGCCT	AGAATTATTA	GGAAACAAAT	GGTTTTGCTG	TCTTTTGGTC	60
ATTAGCTTGG	CCCCATGTTT	AAGCATTCCG	TAACAACTGT	GAAGAGCCTG	CTACAAATAA	120
AGTGGTAGGT	GCTCTGAAGA	AAAATAAAGC	TGTTAAAGGG	AATAGAAAGT	GATGAAGGCA	180
GGGGCTGTTA	GACAGGCTGG	TCAGTGTCTG	AGGAAGTAGC	CCTGCACTGA	GACCTGAAAA	240
GTAAGAAGC	AAGCCATGGG	GAGTTGGGGA	GGAGCATTCC	AGACAGAGGC	TTGATGTGTT	300
GAACCATCTT	TTCCAAGCTC	TTCTCTGTT	ACCTTCTCTT	TAGTCACTAT	GTCCCCTTTC	360
TATCCGAGAC	CATAATTCCA	CCATTATCT	TAAGGCTGAG			400

(2) INFORMATION FOR SEQ ID NO:372:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 268 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:372:

GAACGATTGA	ATTCTAGACC	TGCCTCGAGA	TCAGCACTAA	CCCCCCCCAAC	TCCCAGCCTT	60
TAGTTTGCTG	TAGGCTGTCA	AACCAGATAA	CCAACTTGT	TAAATTGAGA	ATCAATAGGC	120
TGTACATAGG	GACTACAACA	GAATGACGCT	CATTATTGAC	AGAATCAAGT	TCAAACCTCT	180
TGTCCTGGCG	TCTGTTGGCC	TCTGGCAGCT	GGCTCATCTG	GCATTAGCTG	GTTGCACGAG	240
TTGCTGCAAC	CCTCCCACCC	CGCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:373:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 463 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:373:

GTGAGGTTTT	AACTGAGCTC	GAAGAATTGG	AATCAAAAGA	GATAGGTTTG	TCTCAGTCCA	60
GACAGTGGAT	AGCATAAGGA	AAGTACAAC	GCAGAAAAGA	GGGGGACAGC	GAAGAGACTG	120
GATTGATGCG	TTATCTAGGC	GGTACCTGTC	TCCATTCTTT	TCTAGCCAGC	CTTTGAGCAT	180
TTCATCAAGA	ATAGAGGAAT	TCAAAGTACT	GCAGTCTGCT	TGAACCAAGT	CTTGTGAGTG	240
GCTCTAAAAA	AAATACTTGA	ATTGAACTT	GAAAGAACAC	TCAAATAAGG	TTGGGGGCTT	300
CTCTTTGTTT	AATACTTTAA	GCGTCTTATT	TCTAACATAA	ATATACTGAT	TGCACAGAAT	360
TTGATTGTTT	ATAGCAGCAG	TTGCCTGTAC	TTTAGAATTC	TCAGATATTA	GAGCTGAAAG	420
ATCATCTGAG	TTACTTTATA	AATGGGGAAA	TCTCGATCTC	GAG		463

(2) INFORMATION FOR SEQ ID NO:374:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 451 base pairs  
(B) TYPE: nucleic acid



(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:374:

GAACGGCAGC	CATTGAAGCA	TATTGGAAAA	GGAAGTGGGG	AATTTATTAA	AGCACTCATG	60
AAGGAAATTC	CAGCGCTGCT	TCATCTTCCA	GTGCTGATAA	TTATGGCATT	AGCCATCCTG	120
AGTTTCTGCT	ATGGTGCTGG	AAAATCAGTT	CATGTGCTGA	GACATATAGG	CGGTCCTTGA	180
GAGAGAACCT	CCCCAGGCAC	TTCGGCCACG	GGATAGAAGA	CGGCAGGAGG	AAATTGATTA	240
TAGACCTGAT	GGTGGAGCAG	GTGATGCCGA	TTCCATTAT	AGGGGCCAAA	TGGGCCCCAC	300
TGAGCAAGGC	CCTTATGCCA	AAACGTATGA	GGGTAGAAGA	GAGATTTTGA	GAGAGAGAGA	360
TGTTGACTTG	AGATTTTACA	CTGGCAACAA	GAGCCCTGAA	GTGCTCCGGG	CATTTGATGT	420
ACCAGACGCA	GAGGCACGAG	AGCCCCTCGA	G			451

(2) INFORMATION FOR SEQ ID NO:375:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 513 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:375:

GAATTCGGCT	TCATGGCCTA	CTCAGATCTT	AAAATTCAGG	CTGTCAAAGA	GATTTGCTAT	60
GAGGTTGCTC	TCAATGACTT	CAGGCACAGT	CGGCAGGAGA	TTGAAGCCCT	GGCCATTGTC	120
AANATGAAGG	AGCTTTGTGC	CATGINTGGC	AAGAAAGACC	CCAATGAGCG	GGACTCCTGG	180
AGGGCAGTGG	CCAGGGACGT	CTGGGATACC	GTCGGTGTG	GGGATGAGAA	GATCGAAGAC	240
GTCATGGCCA	CTGGGAAAGG	CAGCACTGAT	GATAGTGACC	TCAAGGTTCA	TATAGACAAG	300
CTGGAAGATA	TTTTGCAAGA	AGTCAAAAAG	CAAAATAACA	TGAAAGACGA	GGAGATAAAA	360
GTCTTAAGAA	ATAAAATGCT	CAAAATGGAA	AAAGTCTTGC	CATGATCGG	ATCTCAGGAA	420
CAGAAAAGCC	CAGGAAGCCA	CAAAGCAAAG	GAGCCTGTTG	GTGCTGGTGT	TAGTAGCACC	480
TCTGAGAATA	ATGTAAGTAA	AGGAGACCTC	GAG			513

(2) INFORMATION FOR SEQ ID NO:376:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 303 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:376:

CAGAATGGGA	TCGAAGCCTG	CCTCCTTAGG	NTCTTTGCCN	TCATCCTCTC	TGGCAAATGC	60
AGTTACAGCC	CGGAGCCCGA	CCAGCGGAGG	ACGCTGCCCC	CAGGCTGGGT	GTCCCTGGGC	120
CGTGCGGACC	CTGAGGAAGA	GCTGAGTCTC	ACCTTTGCCC	TGAGACAGCA	GAATGTGGAA	180
AGACTCTCGG	AGCTGGTGCA	GGCTGTGTCT	GATCCCAGCT	CTCCTCAATA	CGGAAAATAC	240
CTGACCCTAG	AGAATGTGGC	TGATCTGGTG	AGGCCATCCC	CACTGACCCT	CCACACGCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:377:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 334 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:377:

```
GAATTCGGCC TTCATGGCCT ACTTCATTGT AAGGTACTTC TTTGCGGCGC TGACAGTGCT    60
CACGCTCCTG GGCCTCCTCC ATGGACTCGT GCTGCTGCCT GTGCTGCTGT CCATCCTGGG    120
CCCGCCGCCA GAGGTGATAC AGATGTACAA GGAAAGCCCA GAGATCCTGA GTCCACCAGC    180
TCCACAGGGA GCGGGGCTTA GGTGGGGGGC ATCCTCCTCC CTGCCCCAGA GCTTTGCCAG    240
AGTGACTACC TCCATGACCG TGGCCATCCA CCCACCCCCC CTGCCTGGTG CCTACATCCA    300
TCCAGCCCCT GATGAGCCCC CCAGGTCCCT CGAG                                334
```

(2) INFORMATION FOR SEQ ID NO:378:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 305 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:378:

```
GGATTTTAAG GATCACATTC CAAGGGAAAC TGATATGAAG GTTGCAATGA ATGTGTATGA    60
GTTATCATCA GCTGCCGGAT TACCTTGTTA GATTGATCCT GCATTGGTCG TAGCTCTTTC    120
TTCACAAAAA TCGGAAAACA TTAGTCCAGA AGAAGAGTAT AAAATGTCCT GCCTTCTCAT    180
GGTGTTTGTG GCAGTTTCTT TGCCAACT GGCAGTAAT GTGATGTCTC AGTACAGCCC    240
TGCTATAGAA GGGCATTGCA ACAACATACA TTGCTTGGCC AAAGCCATCA ACCAGATTGC    300
TCGAG                                305
```

(2) INFORMATION FOR SEQ ID NO:379:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 329 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:379:

```
GAATTCGGCC TTCATGGCCT ACCCAAACAT TATCCCTCTA CACTGTCCCC ACTATGCTAT    60
ACCCCTGCAC TATACCCCTA TGCTGTCTCC CTTACGCTAT CCCCCTATGC TATGTCCCCT    120
ACACTATCCC CCTTTGTTGT CCCTCCATGC TACTCCCTAC GCTATCCCAC TACTCTATCC    180
CCCTGACGCT GTCCCCCTAC GCTATCCCGC TACTGTGTTT CCCCTACACT ATCTCCATAC    240
ACTGTCCCCC TACTCTCTCC CCCTACTCAA TTCCCCCTAC ACTCTCCGCG TACTATATCC    300
CCGCTACACT ATCCCCCGAC GCTCTCGAG                                329
```

(2) INFORMATION FOR SEQ ID NO:380:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 273 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:380:

GTCGAATGC TCTTTACTTC CTTTGTGGAG CCTCCCTGCA CAAGCAGCAC TTTCTTTTGC	60
CATAGCAACA TGTGCATCAA TAATTCTTTA GTCTGTAATG GTGTCCAAAA TTGTGCATAC	120
CCTTGGGATG AAAATCATTG TAAAGAAAAG AAAAAAGCAG GAGTATTTGA ACAAATCACT	180
AAGACTCATG GAACAATTAT TGGCATTACT TCAGGGATTG TCTTGGTCCT TCTCATTATT	240
TCTATTTTAT TACAAGTGAA ACAGCATCTC GAG	273

(2) INFORMATION FOR SEQ ID NO:381:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 338 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:381:

GAATTCGGCC TTCATGGCCT ACATAACTCT CCACAGGCTC CCCTGGGAGG GGTGCCCCCA	60
CCTCACCCGC CACCTCACTT CTCAGCCCCT CTTCCTATCC AAGGGCTCCC TGGGCTGCCC	120
CCACCCTAGT CATGATCTCG CTCCTCTACT CTCTCGTAGT ACTTTATTTT TACCTTGCTC	180
CTGGCTCACA TTACATGCTT ATCTTGATT TATAGATGGT TCTACATATG TCTCCTTTTG	240
CATCCTTTTC TCAAAGCTCC TGTGAGGCCA GGGATGGTTT TATGCCTTTT CTCATCCCCT	300
TATGTTCTAG TATAATGCTT TACACATGTT TACTCGAG	338

(2) INFORMATION FOR SEQ ID NO:382:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 334 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:382:

GAATTCGGCC TTCATGGCCT ACTTTCTCTC CTTTTTTCCT GTAAGTGTGC TGGTTTTGTT	60
TTGGTCTTCC TCTCATACCC GTTTCCTGCAT TTCATCTTTT CTTTCTATTG GGACTTCATT	120
TCATTTTTTT TTAACCTTAT CTTTGTGTTT TCTTGTTTAT CCCATCCTTT TTGATAAAAT	180
CCATCGCATG TGTCTTCTTT TTTTCTTTAT TTTCTTTTCT TTCCTTTTTT CTTTTTCTTT	240
CTCCCAAAT TTTTCTTTT CACAGCATTG GAACACGGGA GGTAGTCACC CAGAAGAACT	300
TGAGCGGCCT GGTGCCCATC CGAGACCACT CGAG	334

(2) INFORMATION FOR SEQ ID NO:383:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 232 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:383:

```
GCAGAAAATA TGGTATCGGT TTCATTTAAT AAAAATGAAA AAATAATTTT CAGTTATCAG      60
TAATTTCTCA GTTACACAAC CTCTGCCTTC ATTTCCGCTT AGCCATGAAC TTTTACTGCT      120
ACAAAGGAAT TTAATATAGC CAAATTCTAC AATTCTGGCT GGGTGTGGGG GCTCATGCCT      180
GGGATCTCAG TAGTATGGGA CCCCAGAGCA GGTCTAGAAT TCAATCCTCG AG              232
```

(2) INFORMATION FOR SEQ ID NO:384:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:384:

```
GCCTCTGCTT TTAATTCATT GGCAACTGTT ACGATGGAAG ACCTGATTCG ACCTTGGTTC      60
CCTGAGTTCT CTGAAGCCCG GGCCATCATG CTTTCCAGAG GCCTTGCCTT TGGCTATGGG      120
CTGCTTTGTC TAGGAATGGC CTATATTTCC TCCCAGATGG GACCTGTGCT GCAGGCAGCA      180
ATCAGCATCT TTGGCATGGT TGGGGGACCG CTGCTGGGAC TCTTCTGCCT TGGAAATGTT      240
TTTCCATGTG CTAACCCTCC TGGTGCTGTT GTGGGCCTGT TGGCTGGGCT CGTCATGGCC      300
TTCTGGATTG GCATCGGGAG CATCGTGACC AGCATGGGCT TCAGCATGCC ACCCTCTCCC      360
TCTAATGGGT CCAGCTTCTC CCTGCCCACC AATCTAACC GTGCCACTGT GACCACACTT      420
CTCGAG                                         426
```

(2) INFORMATION FOR SEQ ID NO:385:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:385:

```
GAATTCGGCC TTCATGGCCT AGGCCCTTAA ACTGGATTCA AAAAATGCTC TAAACATAGG      60
AATGGTTGAA GAGGTCTTGC AGTCTTCAGA TGAAGCTAAA TCTCTAGAAG AGGCACAAGA      120
ATGGCTAAAG CAATTCATCC AAGGGCCACC GGAAGTAATT AGAGCTTTGA AAAAATCTGT      180
TTGTTTCAGG AGAGAGCTAT ATTTGGAGGA AGCATTACAG AACGAAAGAG ATCTTTTAGG      240
AACAGTTTGG GGTGGGCCTG CAAATTTAGA GGCTACCTCG AG              282
```

(2) INFORMATION FOR SEQ ID NO:386:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:386:

```

GATTGAATTC TAGACCTGCC TCGAAGGCCG AGAGGGGAAAG TTGAAAGGTC CCAAATTCAA      60
GATGCCTGAG ATGAACATCA AAGCCCCCAA GATCTCCATG CCTGACATTG ATCTTAACCT      120
GAAAGGACCC AAAGTGAAGG GTGATATGGA TGTGTCTCTG CCAAAAGTGG AAGGTGACAT      180
GCAAGTTCCT GACTTGGATA TTAAAGGCCC CAAAGTGGAT ATTAATGCCC CAGATGTGGA      240
TGGACTCGAG                                         250

```

## (2) INFORMATION FOR SEQ ID NO:387:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:387:

```

GAATTCTAGA CCCACCTCCA CCTTTAACTC GAAGTAACAC TGCAAATCGT TTAATGAAAA      60
CACTCTCAAA ACTGAATTTA TGTGTTGATA AAACAGAGAA AGGAGAAAGT AGTAGTCCTT      120
CTCCATCAGC TGAAAAGGA AAGATTCTAA ATGTTTCAGT GATTGAAGAA AGTGGCAATA      180
AAAACGATCA AAAGTCTCAA AAAATTATGA AGAAGAAAGA GTCATCTTCT ATGTTGGCTA      240
CAGTTAAAGA AGAAGTCTCT GGTAGTTCAG CAGCTGTTAC GGAGAATGCT GATAGTGATA      300
GAATTTCTGA TGAAGCAAAT AGTAATTTTA ACCAAGGGCT CGAG                         344

```

## (2) INFORMATION FOR SEQ ID NO:388:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 165 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:388:

```

GGAGTAATCA GAGGTGTTCT TGTGTTGTGA TAAGGGTGGC AGGAGTGGAC ATTCTTCACA      60
TACACCCATT ATTGTTTTGA AGTGTTTAAT TACCTTTTGA GCTACATTTT TGCAGCTGAG      120
TTTAGAATGA AAACCACAAG AGTTTTATTG TTGGCTGTAC TCGAG                         165

```

## (2) INFORMATION FOR SEQ ID NO:389:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:389:

```

GAATTTCGGCC TTCATGGCCT AGAACAGAGC TTACTTATTC TTTCTGAAAC CAAGGCTTCT      60
CTAGTGAGCA CCATGAGCCT TTGGAAACAA CAGATGTATA CAATAGCAAA GTTTCATTTT      120
TTTACCTTGA AACGTGAAAG TAAATCAGTG AGATCAGTGT TGCTTCTGCT TTTAATTTTT      180
TTCACAGTTC AGATTTTTAT GTTTTGGTT CATCACTCTT TTAAAAATGC TGTGGTTCCG      240
ATCAAACCTCG AG                                         252

```

## (2) INFORMATION FOR SEQ ID NO:390:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 479 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:390:

```

GAATTCGGCC TTCATGGCCT AGGATGTTCA CTTGCATGCC TCTGGATTTT AAAATTATTG      60
TTCACATGAC TCCTTTTCTG TCGTTGGGA AGCAGCTACA GAGCAGTAGA ATCCACTGAA      120
TTGGTACACT GAAGCAGGCA TGCCATTAA ATGAAGGCAG TTAACCTGA CTGTTGTATC      180
ACCAGAGTTA AAGAATTCTG GTGCCCCTCT TTAAGTCTTC AGGAAGTGTT TAGAGGCTTA      240
TTCACATTAG TTAAACAGG CCCCCCCCAC CTTCCCCAAG GCAACAGAAA ACATAACCAT      300
TAGCTCTCTT CCTGTTTCC TTCTCATTT CATGCTTGCT TCGGCTGCTA AACTGAATTT      360
TTGTTACTTA GAATATTATA AAGTGTGGAT GCTTCTATA ATGCTATTGG TCTAAGTGTG      420
ATTAAATTC ATTAAGGTGT ATAAGCCTCT AATTATTACA TAACTGGCAC TGGCTCGAG      479

```

## (2) INFORMATION FOR SEQ ID NO:391:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:391:

```

GAATTCGGCC TTCATGGCCT AGCCTATTAC ACAGTAAGTT AATAATTGTG TCCTTGCAAA      60
TAAGCATTGT GTTCTGAAAT GGAATCAGCA TATTCCCTA TAAAGACACT TCCACTCATT      120
CATTAAATGA GCAGCCCCAG TTGATAAAGA ATCAGTATAT CATGTTCTGA TATTTAATCA      180
GCAAACATCAT TTATTCAGTA GAAATTGAA TTCCTGTGAT GTGCCAGGCT TGTGAGGAGG      240
GAGACTCGAG                                     250

```

## (2) INFORMATION FOR SEQ ID NO:392:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:392:

```

GAATTCGGCC TTCATGGCCT AGTCGACTCC TGTGAGGTAT GGTGCTGGGT GCAGATGCAG      60
TGTGGCTCTG GATAGCACCT TATGGACAGT TGTGTCCCA AGGAAGGATG AGAATAGCTA      120
CTGAAGTCCT AAAGAGCAAG CCTAACTCAA GCCATTGGCA CACAGGCATT AGACAGAAAG      180
CTGGAAGTTG AAATGGTGGA GTCCAACCTG CTTGGACCAG CTTAATGGTT CTGCTCCTGG      240
TAACGTTTTT ATCCATGGAT GACTTGCTTG GGTATGGAGA GTCGGCTTGA CTACACTGTG      300
TGGAGCAAGT TTAAAGAAG CAAAGGAACCT CCTCGAG                                     337

```

## (2) INFORMATION FOR SEQ ID NO:393:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:393:

```

GCGATTGAAC TCCTGACCTC AAGTGATCTG CCCACTTGTG CCTCCCAGAA CTGGGATAAA      60
AAAAAAAAAA ATAGATCCTT GGTATTATTC CATTACATAC GGATTGTAAA ATTCAGTTAA      120
ACATTCATCT CTGGGTGGGC ATTTATGTAT TTCTTTTGTT TGTGTGTTTG CAGCATTGCT      180
CTGTTAAACC TTTTATAAG TACATCTCGA CTCGAG                                216

```

## (2) INFORMATION FOR SEQ ID NO:394:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:394:

```

GAATTCGGCC TTCATGGCCT ACCACATTTG TAACGGAGCC ATTGAAGCAT ATTGGAAGAG      60
GAAGTGGGGA ATTTATTAAG GCACTCATGA AGGAAATTC AGCGCTGCTT CATCTTCCAG      120
TGCTGATAAT TATGGCATTG GCCATCCTGA GTTCTGCTA TGGTGCTGGA AAATCAGTTC      180
ATGTGCTGAG ACATATAGGC GGTCCTGAGA GCGAACCTCC CCAGGCACTT CGGCCTGGGA      240
TACTCGAG                                248

```

## (2) INFORMATION FOR SEQ ID NO:395:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:395:

```

GAATTCGGCC TTCATGGCCT AGCCTTCCTC TACCATTTTT AATTTTTTTA GACTTCATTT      60
TGTGATTTAT TGCTGCTCTG GGGGCTTCAC ATCCAATCCT TTTATGGTTT CATCTTTCCT      120
TTCCTTACAT TTGTTGCATA TAACAATGGC GTGTTTAGCT ACTGCAGTGA AAAATCAATC      180
AAGCCTATTC CATATTCACA GGCTTGCAAT GGCACCAACG GTCCTGGAT CTCTCGAG      238

```

## (2) INFORMATION FOR SEQ ID NO:396:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 188 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:396:

GAATTCGGCC	TTCATGGCCT	AAGTTGATCC	GGATACACAC	CTGCTAAAAC	TGCTTAAAC	60
ATTAGAAGGA	CATGCTTATG	GCGTTTCTTA	TATTGCATGG	AGTCCAGATG	ACAACATATCT	120
TGTTGCTTGT	GGCCCAGATG	ACTGCTCTGA	GCTTTGGCTT	TGGAATGTAC	AAACAGGAGT	180
CTCTCGAG						188

## (2) INFORMATION FOR SEQ ID NO:397:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 485 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:397:

GAATTCGGCC	TTCATGGCCT	ACAGGCATGT	TGAGATTGG	AAAAGTGGAT	GTAAGTAAA	60
TTCAGATAGC	TTTAGTGATT	GTCTTTGTGT	TGCTGCATT	TGGAGGAGCA	ACAATGTGGG	120
ACTATACGAT	TCCTATTCTA	GAAATAAAAT	TGAAGATCCT	TCCAGTTCTT	GGATTTCTAG	180
GTGGAGTAAT	ATTTTCCTGT	TCAAATATT	TCCATGTTAT	CCTCCATGGT	GGTGTGGCA	240
AGAATGGATC	CACTATAGCA	GGCACCAGTG	TCTTGTCAAC	TGGACTCCAC	ATAGGACTAA	300
TTATTATACT	GGCAATAATG	ATCTATAAAA	AGTCAGCAAC	TGATGTGTTT	GAAAAGCATC	360
CTTGTCCTTA	TATCCTAATG	TTTGGATGTG	TCTTTGCTAA	AGTCTCACAA	AAATTAGTGG	420
TAGCTCACAT	GACCAAAAGT	GAAGTATATC	TTCAAGACAC	TGTCTTTTGG	GGGCCAGGGC	480
TCGAG						485

## (2) INFORMATION FOR SEQ ID NO:398:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 268 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:398:

GAATTCGGCC	TTCATGCCTA	GTGGATCCGG	AAACTCTGTG	GCTCTAGACT	TTCAACTATT	60
TTATTTTTC	TTTGTATTT	TTTGTTGTT	GCTTGCTTTT	TTACAATGGG	AACTAGAATG	120
TAAGATGCCA	AACTCAGCCT	GTGGGGAACA	TGGATTTTCA	CAACAGCAAC	CACAGAGCGT	180
GGTTTCATT	TCTATCCCT	GTTTCATGTG	GAGGCAGAGA	AGGAAATCAG	GTGCTCAGTT	240
CCAGGGACAT	CACAGGACAG	GACTCGAG				268

## (2) INFORMATION FOR SEQ ID NO:399:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:399:



```

GAATTCGGCC TTCATGGCCT ACACCTCTTC TGCCAACCAG CTGCTTGGA TGA CTGCTGCGAT      60
CCCGTGTGCT TGTCTGGGTA TCTTCCTGGG AGGTCTTTTG GTGAAGAAGC TCAGCCTGTC      120
TGCCCTGGGG GCCATTCGGA TGGCCATGCT CGTCAACCTG GTGTCCACTG CTTGCTACGT      180
CTCCTTCCTC TTCCTGGGCT GCGACACTGG CCCTGTGGCT GGGGTTACTG TTCCCTATGG      240
AAACAGCACA GCACCTGGCT CAGCCCTGGA CCCCTACTCG CCCAAG                      286

```

## (2) INFORMATION FOR SEQ ID NO:400:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:400:

```

GAATTCGGCC TTCATGGCCT ACCTGCCTCG AGATGATCAT TCTTTCTTG CTCTAGGCT      60
CTGTGTCCTC CTGGTTTCCT CCAACCTCTC TGGTCCTGTT TCATTGCTG TGGGTTCTTT      120
TTGCCTTTGC CACCCCTCAA ATGGGGCTTC TCACTCACAC TAGTGAGTTT TCAGTGCTTG      180
CAGACCCAAC ACCCTCTTTT TATAACAAAT ATTTTTTAAT ACGTCCTTTT CCACAAC TCG      240
AG                                                                242

```

## (2) INFORMATION FOR SEQ ID NO:401:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:401:

```

GAATTCGGCC TTCATGGCCT AGTCCCATCA GAGGGAGCTG ATGAAGAATG GTCCCTGTAA      60
GTAAGTCACT AGGTTCAACA ACTGCCTGGC CGAGCACTCA GCGCGTGGAG CTCAGGCCAA      120
CACCAGAGCC CCGGTTTTAG GGGCCAGGAG AGCAGGTGAC CAATTATTTG GGGAGTCTTG      180
GGTAGAATTT CCGCCACACA TTCTCCCCAG GGCTGCAGGG GTCTTCCGAG GCAGGGCGGT      240
GGAGCAGGAT TCAGGATGTG GTGGGAATAG AGTGAGGGGC AGTGGGTGGT GCTCGAG      297

```

## (2) INFORMATION FOR SEQ ID NO:402:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:402:

```

GAATTCGGCC TTCATGGCCT AAAAACTAG AATAATGGAA GAGTAAATAA ACACAATTCT      60
TAATGTATTA CAAGAAATAA AAGGTTTAAA AGTAGATTTT TTAATTGAAA AGAATTAAAT      120
CAGATAAAAA TATTTGAGAG GTAATGCAA CATTTAAGTT TGTCAAAGAA GCTTCAACAT      180
CTGGATAATA GGAAAGAAAA AAACCAAGC AAAAGAAAA TAAGCCACAA ACTAAAAAAT      240
GTTTAGTTCT TGAAATTTAA AAAAGTAAAT ATTGAAAGAG CATGCTGTGT ACCTGAGATT      300

```

ATTTACCCAA AACTCGAG

318

## (2) INFORMATION FOR SEQ ID NO:403:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:403:

GAATTCGGCC	TTCATGGCCT	AGATTGAATT	CTAGACCTGC	CTCGAGTCTG	GGCACCCCTGA	60
GCAGCAGCCT	GAGCCGGGCC	AAGTCTGAGC	CCTTCCGCAT	TTCTCCGGTC	AACCGCATGT	120
ATGCCATCTG	CCGCAGCTAC	CCAGGGCTGC	TGATCGTGCC	CCAGAGTGTC	CAGGACAACG	180
CCCTGCAGCG	CGTGTCCCGC	TGCTATCGCC	AGAACCGCTT	CCCCGTGGTC	TGCTGGCGCA	240
GCGGGCGGTC	CAAGGCGGTG	CTGCTGCGCT	CTGGAGGCCT	GCATGGCAAA	GGTGTCTGTCG	300
GCCTCTTCAA	GGCCAGAAC	GCACCTTCTC	CAGGCCAGTC	CCAGGCGGAC	TCGAG	355

## (2) INFORMATION FOR SEQ ID NO:404:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:404:

GAATTCGGCC	TTCATGGCCT	AGTCATGGAA	CAAGTCCTTG	CTAAACTAGA	AAACAGGACT	60
AGTATTACTG	AAACAGATGA	ACAAATGCAA	GCATATGATC	ACCTTTCATA	TGAAACACCT	120
TATGAAACCC	CACAAGATGA	GGGTTATGAT	GGTCCAGCCT	GGGTGACAGA	GCGAGACTCT	180
GTCTTATAAA	GAAAAAAAAA	AAAAGAAGTG	GCAGCTCTGT	CTGCTTCTCA	CAGAGTTGCT	240
AGGGACAAC	TGCTGAGGCG	GCACCTGCCC	TTGGGCTCCC	CGGGTGGGCT	GCTATTTGCC	300
TGTGGGCTCT	GCCTGCCCCG	CTGTCCAGTC	CCCGGGGTGG	CTCGAG		346

## (2) INFORMATION FOR SEQ ID NO:405:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:405:

GCGATTGAAT	TCTAGACCTG	CCTCGAGAAC	AGGGAACCTT	CAAACAAAAG	ATATATCATA	60
GGAAGTCAGG	TGAGAAGCTG	TCAACTGGGC	AGGCAGTGAT	GAGAATCGTA	GTTGTCTTAC	120
TGTACTTTT	TGTTTTGTTT	AAAAAACCTA	AAGCATCACG	CATTTTGAAA	GCAGAGTTTG	180
CAGAGAGCCC	CCAACAGAGC	CAGAACTTGC	CAAGAGCGAC	TGATATTCT	AGAATCCCAC	240
GAGGCAG						247

## (2) INFORMATION FOR SEQ ID NO:406:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:406:

```

GAATTCGGCC TTCATGGCCT ACAACATCAA AACTCCCAAG CAAATGGATG AATTCATTGA      60
GATCCAAAGT TCAACAGGAA CCTGGTACCA GCGCTGGCTG GTCAGATTCA AGACCATTTT      120
CAAGCAGGTC TGGGATAATG CCCTGTACTG TGTGATGGGG CCTACAGAA TGAATACACT      180
GATTCTGGCC GTGGTTTGGT TTGCCATGGC ATTCAGTTAC TATGGACTGA CAGTTTGGTT      240
TCCTGATATG ATCCGCTATT TTCAAGATGA AGAATACAAG TCTAAAATGA AGGTGTTTTT      300
TGGTGAGCAT GTGTACGGCG CCACAATCAA CTCACGATG GAAAATCAGA TCCACCAACA      360
TGGGCCTCGA CCTGACTTTG CCCCCTTGCC CATCAGCCAT TTGCCATCAC CCCAAACAAC      420
TCAGCTTCGG GGAAGTCTCG AG                                         442

```

## (2) INFORMATION FOR SEQ ID NO:407:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 154 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:407:

```

CCGAGTGACC TTCTTGATGC TGGCTGTTTC TCTCACCGTT CCCCTGCTTG GAGCCATGAT      60
GCTGCTGGAA TCTCCTATAG ATCCACAGCC TCTCAGCTTC AAAGAACCCC CGCTCTTGCT      120
TGGTGTTCTG CATCCAAATG CGAAGCTCCT CGAG                                         154

```

## (2) INFORMATION FOR SEQ ID NO:408:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:408:

```

GAATTCGGCC TTCATGGCCT AGTTTACTTC TGCTTGATCT TTATTCTTCC TTGCTACTAA      60
TTTTGGATTT AGTTTGTCTT TTTCTAGACA TTCATTGTTA GATTGTTTAT TTACAATTTT      120
TCTAGTTTTT TTGATGTAGA CATTTA                                         146

```

## (2) INFORMATION FOR SEQ ID NO:409:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:409:

GAATTCGGCC	TTCATGGCCT	AGATGTTGCC	AGTTTTCATG	GAGGAAGTAG	ACATGAAAGC	60
TTGTTTGTA	TGTGTTTGAC	AGAGTAGAAA	GACATTGAAG	AAGGTGATGG	TATACATCAC	120
TTGAATATTT	TTATTGAAAA	GGGAGGGAGG	AAATGGAGCG	TTAGTTGTAG	GACCAGATGA	180
TGTAAAGAGA	GTTTTTTAAA	GTGTACAAAA	CAATGGCATG	TTGTGATACT	AATGAGAAGG	240
AGCCAATAGA	GAACAAAAAA	TTGATGATGC	AGGAGACGAC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:410:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:410:

CTCGAGGGAT	CTGGCTTTCT	CTGTCTTCTC	ATTTACTACA	TNACGCTGGT	GAATTAATAG	60
ATNTCTCAAC	AAAAGGACAT	TTAAATCAAC	ATATGACACC	TGTTTAAATT	CTTAAGAAGC	120
CATTAATTAC	ACATTCTTAA	GAAAATGAGC	TATGACACAA	CTCTTCTCAC	TGTATAACTC	180
CTATCTGTGA	TTCTCAATCA	GGTGACTTTT	CAGCTNCAAG	ACGGATCTTT	TCTATTCTC	240
TCCTCTGGTT	CGGACCAATT	AAATGTNTTC	TTTTGCAATC	ANAACATCTC	ANNTGCCAAA	300
TCTTCAAAAAG	CAAAGGAGTT	NGTTAGCAAC	ATATTAGGCC	ATGAAGGCCG	AATTC	355

(2) INFORMATION FOR SEQ ID NO:411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:411:

GAATTCTAGA	CCTGCCTCTG	TATGTTGCTT	TAGCCAGGAT	TCAGAGCTAA	AGTGTAAGTG	60
TGTGCTTCTG	CTTTCTGGAT	GTATCTCTCA	AAATTGCTCT	GTCTGTTTAT	TCAGCTCCTG	120
GATCTACCTT	CTCTTTTCTT	TGAATTGGAC	ACCATTCTATG	TCATTGCTCA	CTCAGAACTT	180
CAGCTGTTCT	CATGATCACA	TGCTTTCTTC	CCTGTTTATG	TCCAAT		226

(2) INFORMATION FOR SEQ ID NO:412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 218 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:412:

```

GAATTCGGCC TTCATGGCCT AGTCTGCTGC TTAGCTTGTA TTTTCAGTTT AATATATTCG      60
TGATCATTA CAAAACAGCG AAGTGAATAA TGGGCATAAA TTTTCCTAAG AAGAATCATT      120
TTCCATACTT ATTTTCAAT ATTATCAAAA AGTATGTAAT TTTGGGGGGT TTTTGGTTT      180
TTTTTTTTTT TGAAACAGAA TCCTGCTCTG TTCTCGAG      218

```

## (2) INFORMATION FOR SEQ ID NO:413:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:413:

```

GAATTCGGCC TTCATGGCCT ACTTTGAACA ATTCGGCATG AATTGAAACC AGGTTTTCCT      60
GTGGAAAGTT ATAGCTTGAT TGGGAGATAG AAGTTGAATT GAGTTCCTTC TTGCAACTCT      120
TAGTGTTTAT TTTTATATCT CAGTAAGACG AGGATACCTT CAGTTTGAAT CTGCATAATG      180
TTCACTGCCA AACTCCTTCT CATTTAATGC TTATGGCCTT CACATTCTCTG TATAATAAAG      240
ATCAATTATC AGCACTCGAG      260

```

## (2) INFORMATION FOR SEQ ID NO:414:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:414:

```

GAATTCGGCC TTCATGGCCT AAGCATATGA ATTTTGGAGA GACAGACATA CAGACCATAA      60
CAGTTCTATT TTCTATACT ATAGTAGAAT ATCGAAATGA GAACATTGAC ATTGGTAAAA      120
GGTGTATGTA TAGTTTATAT GTTATCTTAT CAAAGGGGTA GATTTACAGA ACCAACACAA      180
GTAAGCTATA GAACTAGCCC ATTACCACAA AGATCTCCCA CAAGCTACAG CTTTACAGTC      240
ATACCCACCC GGCTCGAG      258

```

## (2) INFORMATION FOR SEQ ID NO:415:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:415:

```

GAGGACCTTT ATAATCTACT ACTAATTACT GTGAAAGTAA ACATTGTTTA ATATACCACT      60
TCTTAAAGAA ATATTTTGTC TAGTCATTAA TATTCTAGTT CATCTCAAAG CTTCCATTG      120
ACAATTTAAA ATTACTTAAA TTTTAATATT AAAGGAAACA GTTTTCCTGA TTCTCATGAA      180
AGTTCCTATT TGCACTGAAG ATGACTAAAC CTTTtagTCA TAGTTTTAGA AGAATTGGCT      240
TTTTTATAGC CATTTTATTT ACATATGGGT ACGGACTCGA G      281

```

## (2) INFORMATION FOR SEQ ID NO:416:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:416:

```
GAATTCGGCC TTCATGGCCT ACTCAGAAAA GAAAATGAAA ATACCTCTAC ATGTGGTCTT    60
CCTGCTAATC TCTCTGACCT TCCTATTCAC CACCCTCCCC ACTGCCCACT TACTCGAG    118
```

## (2) INFORMATION FOR SEQ ID NO:417:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 273 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:417:

```
GCGAGGATGG CATGGACGCT TATCGAGCAG CTTCAGGGTG GCAGCTACAA GAAGATTGGC    60
TACTATGACA GCACCAAGGA TGATCTTCC TGGTCCAAAA CAGATAAATG GATTGGAGGG    120
TCCCCCCCAG CTGACCAGAC CCTGGTCATC AAGACATTCC GCTTCCTGTC ACAGAAATC    180
TTTATCTCCG TCTCAGTTCT CTCCAGCCTG GGCATTGTCC TAGCTGTTGT CTGTCTGTCC    240
TTTAACATCT ACAACTCACA TGTCCTCTC GAG                                273
```

## (2) INFORMATION FOR SEQ ID NO:418:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:418:

```
GAATTCGGCC TTCATGGCCT AAGCAGTTGC TAATGCCAGC AGTACATAAA TTGAGGATGG    60
AGCAAAAGGA TCGACACCAC CAATGGCTGC ATTGTGATAG GTGTGGACAG AGCCTGCCAG    120
AATTAAACAC ACGCCAGGAC TCGAG                                145
```

## (2) INFORMATION FOR SEQ ID NO:419:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 290 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:419:

GGATTTCGGCC	TTCATGGCCT	AGTGTTTATA	ATTAATCCTT	TAATATTATG	GTTATTAACC	60
TCTTAAACAT	GAATGAATTC	TTGATTGTTT	TAACACAGTA	CCTAAGACTA	ATGCTTTCTG	120
TGGACACCAC	TGAGCTCTGC	CTCAACTCCA	CCCTCTGCGA	CCGGAGGACT	ATGCCCCTAG	180
TAACTGCTGT	CGGTGTGGAC	GCTGTGCTGG	TTCTGTTTTC	TAAAGGAGCA	GAAGGACAGG	240
TCTCTGAGAC	AGGATCGTTG	TCCCTACAGG	AGGAACAGTG	GCCACTCGAG		290

## (2) INFORMATION FOR SEQ ID NO:420:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:420:

GCGATTGAAT	TCTAGACCTG	CCTCGAGCCT	CCCAAAGTGC	TGTGATTACA	GGAGTGAGCT	60
GCCACGCCCA	GCCTACAAGT	TTTTCTTTAA	CTACTGCTTT	AGTCAACCAT	ATCCTCTAGC	120
TTCTGATATT	TTCATTGTTT	GTGTGCATTT	TCTAGATATT	CAACAATTTC	AAATTAGATT	180
TTCTCTTCGA	CTAAAGTGA	AGAATTTTTT	CCCGTTTATT	TTCTACATGC	TAAAGATTTT	240
TATTTTCATT	TTGTTATTAA	TTTCTAGTGT	TACCGTATTG	TCATTAGAAA	ATATGGGCTG	300
GCTCGAG						307

## (2) INFORMATION FOR SEQ ID NO:421:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:421:

GAATTCTGAA	AATATTAAGA	TTTATCCTAG	CACCTACGTT	CAACATACCA	TAATTTTAT	60
ACTTCTCCAT	CTAAATAAAA	CCAAGTTTGT	TCCTACACTA	GTCCAGCCTG	CATTCTCAAG	120
AACTCCAGTG	ATTATACATC	AACATCTAGA	GATCAGGTAT	CCCAATCCTT	TCTTCCTATA	180
TCTAAGCTAA	CTCCTTCTTA	GCCAAATGGT	ACCCTTTGAT	TTTGTGTAA	TCCTTTCCTT	240
CCCTCCACTC	TTAACCCTC	TCATTCCATC	TTCTCCCTCC	CTTTTCCACC	CCACTCTCGA	300
G						301

## (2) INFORMATION FOR SEQ ID NO:422:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:422:

```

GAATTCGGCC TTCATGGCCT AGGTAAAGT TGTCTGGTAA TAAGGTGGAG TGGATTGGG      60
GCAGGTTTTA TGTTTGTGTG CTTCTCTTAG AAGTCAAAGA GTTGGTGAGG TAACTGCAAT    120
CCTGTCTATA TCAGTGTAGT GATAATGCAC TAGTGTAATG AAGAATGGAG CTGCACGTGT    180
GAGGTTTTTC AAGTCCACAA AGATCAGGTA TTGTCTACGG TCAATAAAGA TTTTTTTAAA    240
AAACCCTCTT AACTAAAGAG AGGTAACCTC CTTTTCAAAA CTCTGAAATT TACATGTGCT    300
GACTTATAAT ATGTGTGATC CTCGCTGCTT TTCTGATCCC TGGTGGTTGG GGTGTGTGTG    360
TGTGTGTGTC TGTGTGATGG GCTCTCGAG                                     389

```

## (2) INFORMATION FOR SEQ ID NO:423:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:423:

```

GAATTCGGCC TTCATGGCCT AATCTTAAGT GTTTTACATG CTCTACCTGC CGGAATCGCC      60
TGGTCCCGGG AGATCGGTTT CACTACATCA ATGGCAGTTT ATTTGTGAA CATGATAGAC    120
CTACAGCTCT CATCAATGGC CATTGAATT CACTTCAGAG CAATCCACTA CTGCCAGACC    180
AGAAGGTCTG CTAAAAGGTC AGAGTAATGC AGAATGCGTG CCTTCATCTC AGATTTGTTC    240
ATCACAGGTG GATCCCATGT GTCTTCAGTA GACAAGTCAC CTTGTAGCT AGCACCAGTG    300
CCAGCTCCAT GCCATTGCAC CTCGAG                                     326

```

## (2) INFORMATION FOR SEQ ID NO:424:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 178 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:424:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCCA ATCATTTTTA AATCTAATCT GAACTTTAAC      60
TGGTTAGTTG AGTGCATTTT TATGTGTACT GATGTATTTG CATTTATTCC TTACCACCTT    120
ATTTTGTGCT TTTTATGTTT TTTTCTTCCA CTCTTTTTTT TTCTTTTGA ATCTCGAG     178

```

## (2) INFORMATION FOR SEQ ID NO:425:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 127 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:425:

```

GAATTCGGCC TTCATGTACA TAGATCTTCC TAGTGTCAAT GACAAAGGTG ACATTTGCAA      60
GGCTTTTCT TCATCAGATG CAGGGATCTG GACTTCATGT GTATCCTTTT ATCCACTCCT    120
CTTCGAG                                     127

```



## (2) INFORMATION FOR SEQ ID NO:426:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:426:

```

GAATTCGGCC TTCATGGCCT AGAATTTAAT TGCAGAAAAT TATTCATATT CTTATAATCC      60
TTTAAATGTC TATAGGATTT ATGATGATAT CTCCCCTTCC ATCCTGATTT TTTCAGTTT      120
TTGTTTTTTC TTTTCTTA TAAATTCTGG TAAATGTTTA TTAATTTTAT TCATTTTAA      180
AAAGAACCAG CTTTGGTTT CATAAGTTT TATAATTTT TTGTTTTCAC TTTCATTAAT      240
TCTACTCTTT ATTATTTCT TCATTTTGT TACTTTGGGT TTGTTTGCC ATTTTTTCC      300
TAGTTCTTA AGGTGCCAGC TCGAG                                     325

```

## (2) INFORMATION FOR SEQ ID NO:427:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:427:

```

GAATTCGGCC TTCATGGCCT AGGCACACAG GCGGGCAGC AACATAACG GCACCCATTA      60
AAAAGCAAGA CTCGCTCTG AGACTAAAGG AGAAGTTACC TAAATTTCTG TATAAACTCA      120
GTAATTCATT CACTTTACTA GTATTACATT TATGAAATTC ACCTTTGTGG AAAAAGGAGC      180
GGGAGAGGGA TAAGAAATG CCTGTTTCTA GAAAACGCTC GAG                               223

```

## (2) INFORMATION FOR SEQ ID NO:428:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:428:

```

GAATTCGGCC TTCATGGCCT AAATTCATAC AGAAGACCTT ATTGTGATAA AGTTCAACGG      60
TATAGGTAAA CAACAACAAA AAAACTATCA ACCATAATTT TTTCACCCTA CCAACATTCT      120
CTGAACCTTT CAGTAATATT TTATACACAT GTGCATATTC TGCCTTTTTC ATTTACTATA      180
TCATAAACTT CTTTCTAGAT CATTATTTT CTGCTGCATT TTTTCAGGAT TTATCACCTT      240
TATTTTGTAG TTTAGTTTTT GTGAGTGTAC TCTCGAG                               277

```

## (2) INFORMATION FOR SEQ ID NO:429:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid

- (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:429:

```

AAATGAGCCC TATCACTGAG AAATACGTGT TTCATGATT TACTCTGTGT GTGTGTGTGT      60
GTGTATTTT TTTTGGTTG TCTTCAGCTG ACAGTATGAA AAATGAAACT GCTGAAAAAG      120
CTGAGCACCT GGTCAACCTT GGCCTTCCAT TGCTTTGGCC TTCAGTAAAA AGCAGCCTCC      180
CTTCTAGGTC AGGGAACCAT GCCATTGAGA CTAGTAACGG GCGTTCTGGG CACAGTCCCA      240
CTGTGCACAG GTTTGAGAGG ACAAGTTCAT CAGAAGGAAG GCAGTCCTTA GAAGTCACAT      300
ACGTTGAGCC CCTCGAG                                     317

```

(2) INFORMATION FOR SEQ ID NO:430:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 271 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:430:

```

GAATTCGGCC TTCATGGCCT ACATTCAGAA AACAGAAAAG TTTCAAGAAG CAGGAAGAAA      60
AGACTCACCT ATGATCCCAA CACCCAGAGG TAATAATTTA CCATTTTGG TGTATCTTCT      120
TTGTCTTTTC CTATGTGTTG CCTTATGTAG ATATGTAACA GGTTGTGGTT TAAACCGAAG      180
CTATACCCAT TGTTTGGAGT CAGGCAGGTG CGATAAATTT GTAGGTGGCT CACCAGAAAT      240
CTATTTGCAT GATGAACCTA CAGGACTCGA G                                     271

```

(2) INFORMATION FOR SEQ ID NO:431:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 349 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:431:

```

GAATCATTTT TGGTCACCAA TCTCTCATAT ACCACTACTG GATATTTACA ACATGCTTCA      60
GTGGAGGAGA AGACACTGCT GCTTTGCAAA GATGACCTGG AATGCCAAAA GGTCTCTGTT      120
CCGCACTCAT CTTATTGGAG TACTTTCTCT AGTGTTTCTT TTTGCTATGT TTTGTTTTT      180
CAATCATCAT GACTGGCTGC CAGGCAGAGC TGGATTCAAA GAAAACCCTG TGACATACAC      240
TTTCCGAGGA TTTCGGTCAA CAAAAAGTGA GACAAACCAC AGCTCCCTTC GGAACATTG      300
GAAAGAAACA GTCCCTCAAA CCCTGAGGCC TCAAACAGCA ACTCTCGAG      349

```

(2) INFORMATION FOR SEQ ID NO:432:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 261 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:432:

```
GAATTCGGCC TTCATGGCCT ACCTGGATTT CTCAATTTAT TAAGTTGTAC TTACCTGATG      60
CTGATGATGA TTACTGTATT TACACATTGT CTCAGAGCTC ACTCTTGGCG AGGTTGTGGC      120
CTCGAAAATG CTTTGTGTGC CCTCTGGAAT CTGTCTTTTC AGCTTCATCT CCTCCTCCTC      180
ACCTCCTGCT GTGGTGCACA GATACCTATA GGCAGGCTCC ATCTCCTCCT CCCCAGCTCC      240
TCCCCTAGTG CACACCTCGA G                                     261
```

(2) INFORMATION FOR SEQ ID NO:433:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:433:

```
GAATTCTAGA CCTGCCTCGA GTCCTACGGG AAACCTCCAG GGTTTTAGGA AGCTGACGAT      60
GCAAGTTTAT CCAAATGGGA ATGATAATAA TCATGTTTAT TATCCTGGGG TGCTTCTCCT      120
ATAGCAAGTA CTCACCTAGG TCCTGTTCAT TAGTCAGTCT TTTAATCTGT ACTGAAATAG      180
GTGCTGTGCG ATCCATGGGG AATGAACTCG AG                                     212
```

(2) INFORMATION FOR SEQ ID NO:434:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:434:

```
GGTTGCAGTG AGCTGAGATC GCACCACTGC ACTCCAGCCT GGGCAACAGA GTGAGACTTC      60
ATCTCCAAAA AAAAAAAAAA AAAAAAAGA CAACCACAAC AAAACGAAA CACCACCACC      120
AAAAAGTTT ACTGGTAGAG TCTCCTCTAG ATTGTTTTCT TTTCAATACT TGTTTCATAT      180
TCTCCAAC TG CCTCGTCCC ATAATGTTGG CTGTGCTTTT CTTTGTGCTT ACAGCTCATT      240
GCTGGGATGG ATATGGTGAG TTTTCATGTA CATTGACCAA ATACAATCTC GAG                                     293
```

(2) INFORMATION FOR SEQ ID NO:435:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:435:

```
GAATTCGGCC TTCATGGCCT AGGCTTGAAA GGAAATGAGG GAAATTTTCTG TGAGTTTGAG      60
```

GAATGGCAGA	CTGGGTATGT	GACAAATGAG	TGGGTAAATA	AGGAAATCTC	AGATTGAGAA	120
TCCTGGCAGA	TCTTTCAATG	GGTTAGACTG	CAGGAATATT	GATTTTAAAG	CCAGACTGAA	180
GCAAATTCTA	GTGATAAAGG	AAGGGGAAAG	GGTGGCTGAA	TCAAATGTTC	TACCAATACT	240
CCTTTTTTTT	GTATTTGAGT	TAAAATTGAG	ATTANATGCT	TGGCTTAGAA	GAATGCAAAG	300
CTTCACTGAG	CCTAATAATA	TGGATCCAG	TGGGTGAGTG	GAGGTGAGTT	CACTCGAG	358

## (2) INFORMATION FOR SEQ ID NO:436:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:436:

GCTCGAGAGA	GCTTTTTTTT	TTTTTTTAA	ACATTGTATC	ATTAATTTAT	CACGTGTATC	60
CAAGCTCCTT	TGAGTTTCCC	TGCCCCATC	CCTGTGTCAT	TCCAGCCATA	TCCAGCTACT	120
CCTTCCATGC	TTCCCCATT	CTTGTTTCTG	ACTCTATTAC	TCCCAGTCCA	AATCTTGCTC	180
TTCACGTGCT	GCACCTGTG	CTCTCCTCTC	TCTCAAAAAA	TCTACCCAAA	TTCCACCCCT	240
CTTCACAGGC	CCCTCGAG					258

## (2) INFORMATION FOR SEQ ID NO:437:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:437:

CAAGCCGGCC	ATATTAGAGA	GATGGAATA	AAGCTTCCTT	AATGTTGTAT	ATGTCTTTGA	60
AGTACATCCG	TGCATTTTTT	TTAGCATCC	AACCATTCCCT	CCCTTGAGT	TCTCGCCCCC	120
TCAAATCACC	CTCTCCCGTA	GCCCACCCGA	CTAACATCTC	AGTCTCTGAA	AATGCACAGA	180
GATGCCTGGC	TACCTCGCCC	TGCCTTCAGC	CTCACGGGGC	TCAGTCTCTT	TTTCTCTTTG	240
GTGCCACCAG	GACGGAGCAT	GGAGGTCACA	GTACCTGCCA	CCCTCAACGT	CCACTCGAG	299

## (2) INFORMATION FOR SEQ ID NO:438:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:438:

GAATTCCTAC	TAAATAATAT	TAAGCAGGAA	TTTTTTAGGT	GTTGCTTTTT	AGCTCCTTTT	60
TATCAGTTCT	GGGAAGCAAA	CAGTGCTGCA	TCTCCTTTGC	TCTCATAGAA	TTCTGTAATT	120
TTTATACCAC	AGGTCTCTGC	TAAAAGGCGG	CATGTGTTTA	GAAATTCTAA	AAATGAGGGC	180
TCTGAACCTT	GTAACGTGTC	TGATACGTTT	TCCCTTTTTT	AATCCCAACC	CCCTCGAG	238

## (2) INFORMATION FOR SEQ ID NO:439:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:439:

```

GAATTCGGCC TTCATGGCCT ACAACTTGCA CTTGCTCCA GCATCACTGG CCTCCTGCTG      60
TTATTTAGGT ATACTAGGCA TTTCCTGTTT TAGGGCCTTT GTACCTCCAG TTCCCTCTGT      120
TTGGAATGCT TTTCCCCAGA TAGCCCTGTG GTTAAATCTC TTACTTCCTT TGGGTCTGTG      180
CTCAGATGTT ACTTCTCAG AGGGTCCCCC AAGCCCCAT GCACTCGAG                    229

```

## (2) INFORMATION FOR SEQ ID NO:440:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:440:

```

GAATTCGGCC TTCATGGCCT AGAGTCTATT AACTATTTT CTGTTATACC CTGCCAGAAA      60
AGAATTTTAA AAGTTAGTTT ATGTTTGTG TAACCATGTT CTTCAGAATG CAGGTATGTG      120
AGCATCATGG TTTCTGGGTA ATTCTGCTGC TCCTGTCTTT GAAAATGGAG ATACCACTTG      180
CAGCTTATCC CACTGCTGAG TATTCCAGCA TTGGTAGTGG TTTCACTCCA TTGCATCCAT      240
CCAGAACTTT CACACAGGCC TCCCCATTAC CCAGCATCCT CGAG                    284

```

## (2) INFORMATION FOR SEQ ID NO:441:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:441:

```

GAATTCGGCC TTCATGGCCT AATAAAATAA AAATTGGAAG AATGGCATT TATTACAGTA      60
TAGTTAAGAG ATTGGCTAAG GCAGTAAATA AAACCTAGAA ATGCTCAAAT TTATTGTAAA      120
TTGCTTTTAT AATCATTGAT ATATAAGCA TGCTACTGCT AATCAATTAG TTTTATGTAT      180
TAAGACCTAT CAGCATGTCT TTTTTTGTG ATCTGTTGA CTAAACATG ATGTTCTCTG      240
TACCATTTAA CATTTTCAAG ACATATTCTC CCCAACTCG AG                    282

```

## (2) INFORMATION FOR SEQ ID NO:442:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:442:

```
GAATTCGGCC TTCATGGCCT ACTCACCTGC AATCTATTGT TTATATTGTT GCTATGTATC   60
TCTATTCTTT CTGCATCAAA TAATGAATAG CTCATTTTGT GTTGCCTTCA AGTATGACAA   120
ATTCTTTTCC AAATGTGATT CCAGACAGTA TATCCAAACA TGTCTTTCTT TTCCCATTC   180
TGATCATCCT ACATGTCAAG CACTGCCAAC GTTTACTCAA GAAAGCTTGG TTAGAACCCA   240
G                                     241
```

(2) INFORMATION FOR SEQ ID NO:443:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:443:

```
GCAAGCACAA ATCTAACCAT GAGCTTCAGC AATCAGCTCA ATACAGTGCA CAATCAGGCC   60
AGTGTTCTAG TTTCCAGTTC TACTGCAGCA GCTGCTACTC TTTCTCTGGC TAATTGAGAT   120
GTCTCACTAC TAAACTACCA GTCAGCTTTG TACCCATCAT CTGCTGCACC AGTTCCTGGA   180
GTTGCCCAGC AGGGTGTTTC CTTGCAGCCT GGAACCACCC AGATTTGCAC TCAGACAGAT   240
CCTCTCGAG                                     249
```

(2) INFORMATION FOR SEQ ID NO:444:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:444:

```
GAATTCGGCC TTCATGGCCT AGGGATTTTT TTTCTTTTTT TTCCTCATAT GTGAAGTAAT   60
AGTCTCTTCA CAACAGAAGA AGCCACAAAA CTAACTTAT TGGTCACTGA ATTTTCTTCA   120
AGGTTACGTA CCTCTTGGT ATTTTAAATC TAGATTATGT TGATTTTAT ATTTTGTTC   180
TCATTTTCT ATTTCTTGT TTTCTTACT GCAAATGGGC TCGAG                                     225
```

(2) INFORMATION FOR SEQ ID NO:445:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:445:

```

GAATTCGGCC TTCATGGCCT AGTTTTGGAG AGCTCTACCT ACTAGCTGGT TATTTCTTAC      60
ATTAAATTAA TACCTTTAAA AAGTATTATG AAAATAACAC ACTCAGTAAA AGAAATTTTA      120
AAAAACAAAT GCAATAAAAA TGTGTTTCTT TTCAACCTTT GACTTGTCAC TTCCTCCAGC      180
TTTTCCCTTA TTTAACTGTG AGAGGTATTC TCTATTAGCA GTTACTTATC CCCTTCCTCA      240
AACTCGAG                                         248

```

## (2) INFORMATION FOR SEQ ID NO:446:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:446:

```

GGATTGAATT CTAGACCTGC CTCGAGCGAC CTCTAGAATC CTACATTTGA AATATTCTGG      60
CAGTGAGGTG TTCATCCTAA CTCAGTCAGG TAGCTGTGGA CAGCCTTCAC CTGTTAGGAG      120
CTCCTTAGAA ATAAATTCTG AATACCTTTG GTTTTCTTTT ATCCTCCAGA GGAATTTCCA      180
CTATCTCCGA AGCTGTTCTT TGTTCCACTG ACAATTCGCT TAGTTAATGT TCTTTTTTAG      240
CCTGTACTAT CTCGAG                                         256

```

## (2) INFORMATION FOR SEQ ID NO:447:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:447:

```

GAAGGCAAGA AAATCTATGG AAAGAGAAGG CTACGAGTCC TCGGGCAATG ATGACTACAG      60
GGGTAGTTAC AACACCGTGC TCTCACAGCC TTTATTTGAA AAGCAGGACA GAGAAGGTCC      120
AGCCTCCACG GGAAGCAAAC TCACCATTCA GGAACATCTG TACCCCGCGC CTTCATCACC      180
TGAGAAAGAA CAGCTGCTGG ACCGCAGACC CACTGAATGT ATGATGTCGC GATCAGTAGA      240
TCACCTCGAG                                         250

```

## (2) INFORMATION FOR SEQ ID NO:448:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 198 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:448:

```

GAATTCGGCC TTCATGGCCT AGCTGGGGGG AATAGGTTAT GTGATAAGGA GTCAGTCGGA      60
CAGAGTGGGG TGAAAGATGT TCAGACAGGG AAACACACAT GCAANAGAGG GAAGGTGGGA      120
CACAGCATAT GCNTCCAACA TTTGGTAGGG CCGAGGCCCC ACATGGGAGC AGTGAGAGGT      180
TAGGGATCGA CGCTCGAG                                         198

```

## (2) INFORMATION FOR SEQ ID NO:449:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 163 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:449:

```
GAATTTTCCT TACCAGGAAA ATTATGCTT TACAATTGT CAGAGGTGCA CATTACTAAT      60
TACAATAGGT CACACTTTT CTATGCGCTT CATTATAATA TTGGCAACTT TATTATGCCC      120
CATTACATAC TGTATTATGC TCTACTTTA TATGCATTTT GAG                        163
```

## (2) INFORMATION FOR SEQ ID NO:450:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 122 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:450:

```
GAATTGCTGA TATCTTATAA AGGGGACCTT TTTCTTTAC ATTTCTGACG GTTTTATCA      60
GAATGTATGT ATTAATGCTA TTTGTCTTTG TATATTTATT TTATTTCAG CCACTCTCG      120
AG
```

## (2) INFORMATION FOR SEQ ID NO:451:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 302 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:451:

```
GAATTCGGCC TTCATAGCCT AACTCAAGAT CTCCCATCTA TTAAAGCAGA GGAATAACTT      60
TTGTAGGCTT AATACTGCTT TCTCACTTAG GAAAAGTTGA AATTAAGAAC ACACAGGAAG      120
GGATCATTTC CTAAGGTTTA TGTCTCAAC ATCAAATTGA GTTGAAACTT GACTACAGGC      180
CATCTGCTCA TTCAAAGCAT TACAATAAAT CTGTCTTATT GATGATCAAA ATGAGAGCTG      240
AATTGGATGC AGGATTGGAC ATTGCAAGCT GTTCTCCAA GTGGGATGGA AAGGTGCTCG      300
AG
```

## (2) INFORMATION FOR SEQ ID NO:452:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 265 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:452:

```
GAATTCGGCC TTCATGGCCT ACAAAAATAT TTATTTGACT GAATGATTTA ATATGCAGTT      60
ATGGTGTTTA ATATATCATG TGTTATTTGT TTGTTTAAAT ACAGACATAA CCCACAGTTA      120
TCTTGAACAA GAAACTACGG GGATAAATAA AAGTACGCAG CCAGATGAGC AACTGACTAT      180
GAATTCTGAG AAAAGTATGC ATCGGAAATC CACTGAATTA GTTAATGAAA TAACATGTGA      240
GAACACAGAA TGGCCCGGAC TCGAG                                         265
```

(2) INFORMATION FOR SEQ ID NO:453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:453:

```
GAATTCGGCC TTCATGGCCT ACTTTAATTT CTCTGAGCAG TATTTTACAG TTTTGATGTA      60
TAAACCTGGC ACAGATTATG TTCAGTTTAT TTCTAAGTTT AAGTCATGTT TTTGAATGTT      120
ATATTAAAGG ATATTTTCTT TTTTAAAAAA TCTACAATGT TTATTTTATT ATTATTATTT      180
TTAATCTCGC TTCATCACCA AGGCTGGAGT AAAGTGACGC GACCTCAGCT CGAG          234
```

(2) INFORMATION FOR SEQ ID NO:454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:454:

```
GAATTCGGCC TTCATGGCCT ACGCACATCC GCAGTCAGCC ACCTCGCGCG CGCCTCCAGG      60
AGCAAGGATG GAGAGGCTGG TGATCAGGAT GCCCTTCTGT CATCTGTCTA CCTACAGCCT      120
GGTTTGGGTC ATGGCAGCAG TGGTGCTGTG CACAGCACAA GTGCAAGTGG TGACCCAGGA      180
TGAAAGAGAG CAGCTGTACA CACCTGCTTC CTTAAATATG TCTCTGCAAA ATGCCCAGGA      240
AGCCCTCATT GTGACATGGC AGAAAAAGAA AGCTGTAAGC CCAGAAAACA TGGTCACCTT      300
CAGCGAGAAC CATGGGGTGG TGATCCAGCC TGCCTATAAG GACAAGATAA ACATTACCCA      360
GCTGGGACTC CAAAACTCAA CCCTCGAG                                         388
```

(2) INFORMATION FOR SEQ ID NO:455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:455:

```

GAATTCGGCC TTCATGGCCT AGCTGATATT ATTTCTGAGT TTTTGCTTAT TTGCTTTCTA      60
CATAGAATCA ATAAAAATGA CAACTAGCAT TGCCTATATA TGCAGGTGTG ATACTATTCA      120
GGGTACTAGT ATATTGGCCA CTCATTATGA AACTTTCAGG TCCTCATATA TTTTCTTTTA      180
TTACAATGAT CTAATTATTT CTGATAAATA TTGGATTCAT AGAGGCTAAA GGGCTGGGAA      240
AGGAAAACAT TCGTGACTAC TTACAACCAT TTGATACGAG TTGTGTCAAT ACAGACCTCA      300
CACAGCAGCA CCTCGAG                                     317

```

## (2) INFORMATION FOR SEQ ID NO:456:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:456:

```

GAATTCGGCC TTCATGGCCC ACAAATGGT AATACAAATA AACCCTACT TACTGCTTTT      60
AATGGTAGTT TGTTTTTTTT TTTTGTAGAC AGAGTCTCGC TGTGTCGCCC AGGCTGGAGT      120
GCAGTGGCGC GATCTTGGCT CACTGCAAGC TCCGCCTTTC GGGTTCACAC CATTTCCTCTG      180
CCTCAGCCTC CCGAGTAGCT GGGACTGCAG GCGCCCGACT CCCGGGTTCA CACCATTCTC      240
CTCCCTCAGA CTCGAG                                     256

```

## (2) INFORMATION FOR SEQ ID NO:457:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:457:

```

GAATTCGGCC TTCATGGCCT AGGAGAATCG TGAGACCTCT ATTCCATAT CTTTTTCTAC      60
TACTGGAATT TTTATTTTAA CCATACCCAT AAATTACTTT CTATTTTAAG AAGCAAATAT      120
ATAATTCCTC AGTTTAGTAA AAAGTTCTCA CTTGAAAAGC TGGTATATGA ACTTTAGAGG      180
GCAGATTAAT CAACTGCTAA ATATTATTAA TCTTCTTCT TGGAACTTTC CAACACAAAA      240
GACAGTTTAT AGAAAACAAA GTCAGTGTTT AAAACAGCTG AATGAACTAT CTTTGTATAT      300
TTTATTTGTT TTTGTTTTGT TTTGTTTTGT TGAGACAGAG TCTTGCTCTG TTGTCCAGGC      360
TGGAGAGTAA TGGCACGATG ACTGCAACCT CTGCCTCCCG GGCTCAAGTG ATTCTCCTGC      420
CTCAGTCTCT CGAG                                     434

```

## (2) INFORMATION FOR SEQ ID NO:458:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:458:

```

GAATTCGGCT TCATGGACGA GGAGATCGTG TCCGAGAAGC AAGCCGAGGA GAGCCACCGG      60

```

```

CAGGACAGCG CCAACCTGCT CATCTTCATC CTGCTGCTCA CCCTCACCAT TCTCACAATC      120
TGGCTCTTCA AGCACCGCCG GGCCCGCTTC CTGCACGAAA CCGGCCTGGC TATGATTAT      180
GGTCTTTTGG TGGGCCTTGT GCTTCGGTAT GGCATTCATG TTCCGAGTGA TGTAATAAT      240
GTGACCCTGA GCTGTGAAGT GCAGTCAAGT CCAACTACCT TACTGGTAAA TGTTAGTGGA      300
AAATTTTATG AGTATATGCT GAAAGGAGAG ATACTCGAG      339

```

## (2) INFORMATION FOR SEQ ID NO:459:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:459:

```

GAATTCGGCC TTCATGGCCT ACTTATTTT GTTCTGTGT GTTGTTTTA AATGTGTGTG      60
CGCTCATGTG AGTTTGAAGG GAGTTAGATG CAACAGCAGG AGCTGTGCTC AGGGCAGTGG      120
TGTTAATTAT GGAGGGCGTG GGAAGGCTG GGAAGAGGAG GGGGTTGTAA GACTCCCCTT      180
TTCCCTCGCA GTAAACAGA TGCTGTGAC TGAAAGTCTG TCTGCGGTTA TTGGCAAGAG      240
TGACGGAAG CTGAG      256

```

## (2) INFORMATION FOR SEQ ID NO:460:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:460:

```

GAATTCGGCC TTCATGGCCT AATTGAAAA TTCATAAGTT TCTACCAATA CTCCAATT      60
CAATCCAACA TCTGAGGATC TCCCTAGATT TCCTATTTC ATGATTATAA CTCTGTACC      120
AGATGATAAG AAACATGGAT CTGACTATAC TCAATTTATT CACATATTTT CTCAGTGAAC      180
TAACTTATTT GCTGAATATA ACCAGTCCCC AGCCTTCCAA CTGCCTCTCT CACTTGCCAC      240
CTCTGCATCT TCCCCACTG TCTCCTCAG CAATCAGACT GCCTCTTGCC AAGTCATCAC      300
CACAGCACCC CACTCTCGAG      320

```

## (2) INFORMATION FOR SEQ ID NO:461:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:461:

```

GAATTCGGCC TTCATGGCCT ACCCTCTACT ATTTTGAAC CAAATCAACA ACAACCTATT      60
TAGCTGTTCC CCAACCTTTT CCTCCGACCC CTAACAACC CCCCTCCTAA TACTAACTAC      120
CTGACTCCTA CCCCTCACAA TCATGGCAAG CCAACGCCAC TTATCCAGTG AACCCTATC      180
ACGAAAAAAA CTCTACCTCT CTATACTAAT CTCCTACAA ATCTCCTTAA TTATAACATT      240

```

CACAGCCACA GAACTAATCA TATTTTATAT CTTCTTCGAA ACCACACTTA TCCCCACCCA 300  
TCTCGAG 307

(2) INFORMATION FOR SEQ ID NO:462:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 254 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:462:

GAATTCGGCC TTCATGGCCT AGTACAATTT AATATAATTT CTTACAAGTT TATTACCTAA 60  
AACTTTGCAA ATAATTGAAG TTAGAAGCTT TGGATTTTGT TTTTAGAGCT TAATCCTTTT 120  
CTGTAAGTGG AAATCCTTTC CACTGGTTTA TTTTCCTTTT GATTTTATTT TACTTTGACA 180  
CCCTAAAGGT TTAGTGTTCC TGTTTTAA TCTACTGATC GTTTCCTATG AGATTCCTTA 240  
GAGTACCCCT CGAG 254

(2) INFORMATION FOR SEQ ID NO:463:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 283 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:463:

GAATTCCTAGA CCTGCCTCGA GAGGACGCCG GAGAGAAATG AGTAGCAACA AAGAGCAGCG 60  
GTCAGCAGTG TTCGTGATCC TCTTTGCCCT CATCACCATC CTCATCCTCT ACAGCTCCAA 120  
CAGTGCCAAT GAGGTCTTCC ATTACGGCTC CTGCGGGGC CGTAGCCGCC GACCTGTCAA 180  
CCTCAAGAAG TGGAGCATCA CTGACGGCTA TGTCCCCATT CTCGGCAACA AGGTAGCGCA 240  
GCTGCTTTGG GGAGCTCCTC CCTACTGCCC AGCAAACTC GAG 283

(2) INFORMATION FOR SEQ ID NO:464:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 233 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:464:

GAATTCGGCC TTCATGGCCT AAAAAGTGGT TCCTATTTTC CTGGTTGAAC CTTGAGTGAT 60  
ACACCCAGTA TTGTACCACC CAATTAGTAG ACATTATTTT TTCTTAGGTC ATATTATTCT 120  
CAGCTTATAG AGCAAGAAGT TGAAGCTTAA AGGGTTAGAT TACTTGCCCA AGGTAATACA 180  
GCAAGAATCT TATTTTCATCC AACCTAGAGT GAATATTTCC CCCACATCTC GAG 233

(2) INFORMATION FOR SEQ ID NO:465:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 497 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:465:

```
GAATTCGGCC TTCATGGCCT ACTGATGTTG AAGACGACAC CACGGCTTTG ATGGAATATC      60
AGATATTGAA AATGTCTCTC TGCCTGTTCA TCCTTCTGTT TCTCACACCT GGTATTTTAT      120
GCATTTGTCC TCTCCAATGT ATATGCACAG AGAGGCACAG GCATGTGGAC TGTTTCAGGCA      180
GAAACTTGTC TACATTACCA TCTGGACTGC AAGAGAATAT TATACATTTA AACCTGTCTT      240
ATAACCACTT TACTGATCTG CATAACCAGT TAACCCAATA TACCAATCTG AGGACCCTGG      300
ACATTTCAAA CAACAGGCTT GAAAGCCTGC CTGCTCACTT ACCTCGGTCT CTGTGGAACA      360
TGCTGCTGTC TAACAACAAC ATTAACTTC TTGACAAATC TGATACTGCT TATCAGTGGA      420
ATCTTAAATA TCTGGATGTT TCTAAGAACA TGCTGAAAAA CGTTGTCCTC ATTAATAATA      480
CACTAAGAAG TCTCGAG                                     497
```

(2) INFORMATION FOR SEQ ID NO:466:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 267 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:466:

```
GAATTCGGCC TTCATGGCCT AGCCCCGACT AGCTTTGCCC TAACTCCTTC ATCAAAAGAC      60
CCCCCGCCAG CTTCCACAC CTCATACGCA GCCACATCTG CCCTATTCTC CATGCTTTTC      120
AGCTTGCCCTG CCCTTCCTCA TCTCTCCCTG CCTGTGCAGA CCTCCACCCT TCTTTCCTCC      180
ACCCCTCCAT CCCCCAATGC TTGTAGACCT TCCATTCAAT CCGTCTCATC GTGCGTGGTC      240
TCTGATCGTC CATCACCTGA CCTCGAG                                     267
```

(2) INFORMATION FOR SEQ ID NO:467:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 152 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:467:

```
GTTTACATAA ATATTATACT AGCATTTACC ATCTCACTTC TAGGAATACT AGTATATCGC      60
TCACACCTCA TATCCTCCCT ACTATGCCTA GAAGGAATAA TACTATCGCT GTTCATTATA      120
GCTACTCTCA TAACCCTCAA CACCCACTCG AG                                     152
```

(2) INFORMATION FOR SEQ ID NO:468:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 198 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:468:

```
CAATATTTCA AGCTATACCA AGCATACAAT CAACTCCAAG CTCGGAATTT TAACTTCATG      60
GCAAAACAGAA AAGCTAGACT GAGTTATCAG TGTGTGAGA GGAATATTTG GCCCAACAAG      120
AGTTGTTGGG GTGGGAGGAG GGAGAGACAA AAGGAAAGGA CTGCCAGCTC TCAGAGGGTG      180
GAGATGGGGG ACCTCGAG                                         198
```

(2) INFORMATION FOR SEQ ID NO:469:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:469:

```
GAATTCGGCC TTCATGGCCT ACTGCTATAT TCAAGTTTCT CCCACTACTG TGGTTTCTTT      60
TTTTTTTTTT TTTTTTTTTT TTTTGAGACA GGGTCTTGCT CTGTCACCCA GGCTGGGGTG      120
CAGTGGTGCG ATCTCGGCTC ACTGCAAATT ACACCTCCTG GATTCGAGCA ATTCTCATGC      180
CTCAGCTTCC TGAGTAGCTG GGATAACAGG TATGCACCAC CACCCCTGGC TAATTTTTGT      240
GTTTTTAGTA GAGACAAGTT CTCACCATGT TGTCCAAGCC ACCTCGAG                                         288
```

(2) INFORMATION FOR SEQ ID NO:470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:470:

```
GAATTCGGCC TTCATGGCCT AAAAGAAGAA TACTAATTAG AATTTGAGTT CTAGGGGTTT      60
TTCCTAGGTT TTTCAATTCTA GACTTAGCTT TTATTCAAAC CTGTTGATCC TGCATAGGGG      120
TAGTCTAGCT TTAAAAAATA AAACAATAAA CATAAATGAG CCTATTGAGT TCAATCAGAG      180
TAGGGAGCAG TTTTATTGAA CAGCACATTT TCAAATTCTT CAGTTGTGTT TTGTTTTTCA      240
GCTACGTGTC TCTCTGTGAT AATGAAAAGA CAGGTTGCAA AGCCCGGGAA CTAATAATCAG      300
TTTATGTGGA TGCAGTAGGA CTCGAG                                         326
```

(2) INFORMATION FOR SEQ ID NO:471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:471:

```

GAATTCGGCC TTCATGGCCT AGTGTAAGT GTTTTGCAC AGTGCCAGAG AATTGTCAGT      60
ATTTAATGGT CCTTCCTCCT TATTTATTTT TATTACTTGT TTTTGTTTTT TTGAGACAGT      120
GTCTTGCTCT GTCGCCCAGG CTGGAGAGCA GTGATATTAT CGTGACTCAC GGCAGCCTCG      180
ACCTCCCAGA CTCAGGTGAT CCCTTCACCT CAGCCTCCCA GGCAGCTGGG ACCATAGCTA      240
TGAACAAACA CGTCCAGCTA TGTTTGTGAT TTTTGTGAA GACGGAGTCT CACCATGTTG      300
CCCAGGCTGA TCTCCAACCT CTCGAG                                           326

```

## (2) INFORMATION FOR SEQ ID NO:472:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:472:

```

GGAAAGGTGT TGTCCCTTGT AACATTTTGG TTGGCTATAA AGCTGTATAT CGTTTGTGCT      60
TTGGTTTGGC TATGTTCTAT CTTCTTCTCT CTTTACTAAT GATCAAAGTG AAGAGTAGCA      120
GTGATCCTAG AGCTGCAGTG CACAATGGAT TTTGGTTCTT TAAATTTGCT GCAGCAATTG      180
CAATTATTAT TGGGGCATTC TTCATTCCAG AAGGAACCTT TACAACTGTG TGTTTTATG      240
TAGGCAACCT CGAG                                                         254

```

## (2) INFORMATION FOR SEQ ID NO:473:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:473:

```

GAATTCGGCC TTCATGGCCT ACAGAAATCT AATTCCTGGT GCTATTTGCA ACTACATATA      60
TTTAAATAC AAGGAGATAA ATACCCAGAA CACATTAAGC CTAAGTATTT AACAGAAACA      120
TTTCAAGACT GCTACACAGA AAGGGAAGGA AGCTGTTAAC CCAGCACAGC AGCACACCTC      180
ACATATTTAC GTCTCAGAGA TTAAATGGAA AGAAAGGATC AATCAAAACC TTTAATGCTC      240
AGTTTTCACA AACACAGTCA AGTCTATCAA ATTCCAGAT TTACAG                      286

```

## (2) INFORMATION FOR SEQ ID NO:474:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:474:

```

GAATTCGGCC TTCATGGCCT ACAATTAAAA GGTTCTGTTA AATTACGTCT TTCAGTCTGA      60
AATTACTCTG AGAATTTACT TAAAATTTT CCATTTAAAA ACAGGTATAA AATTAATTGC      120
TAGTTTCCAT AATCACCAG TATAAAGATA GAAAGACCT GTAAGACAAC TGTGTGGTTA      180

```

AATACATGAT AACACATTTA CGTGCCTTTT ATAGAAATCC ACTTATTATG TACATACTGG	240
CTTGTTTTTTT TTCCCACTTC TCCAGTACAC TATTTTCAGGC ACAGGCTCAA AATTTGAACC	300
CAAATGGTCT GTTAGGTCTC TTGACTTTTT CAGTTCAAAG CTCTGCTAAT CTGCTAAACC	360
TAGCCCCAAA CCCACTCGAG	380

## (2) INFORMATION FOR SEQ ID NO:475:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:475:

GAATTCTAGA CCTGCCCGGA GCCCTGACCT AGTCCGGCGT GGAGAGAGGA ATGGAAGCA	60
GTGTCCCTTT TGAGAAGGCA AATTTACAGC TGGCTTTTGT AATCCTAGCT ATTTTGTGT	120
TGTTTGCTAA GTCTTTGATA GTCCCCAGTG TGGTTTGTCT GCCAGTGATC TCAGCACCAC	180
CAGAGAGCTT GTTAGAAATG CGGCATCCCA ACCCCACCAC AGCCCTCCCA AGTCAGATAC	240
TCCCCCTCT CGAG	254

## (2) INFORMATION FOR SEQ ID NO:476:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:476:

GAATTCGCTG TGGAGCTGGG CGTGCTGTTT GTCCGGCCCC GGCCCGGAAC CGGGCTGGGT	60
AGAGTGATGC GGACCCTCCT GCTGGTGCTG TGGCTGGCGA CGCGCGGAAG CGCGCTCTAC	120
TTTCACATCG GAGAGACGGA GAAGAAGTGC TTTATTGAGG AGATCCCGGA CGAGACCATG	180
GTCATAGGAA ACTACCGGAC GCAGCTGTAT GACAAGCAGC GGGAGGAGTA CCAGCCGGCC	240
ACCCCGGGGC TTGGCATGTT TGTGGAGGTG AAGGACCCAG AGGACAAGGT CATCTGGCC	300
CGGCAGTATG GTTCCGAGGG CAGGTTCACT TTCANTTCCC ATACCCNTGT GTGAGACCA	360
GATCTGTTTT CANTCCAATT CCACTCGAG	389

## (2) INFORMATION FOR SEQ ID NO:477:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:477:

GAATTCGGCC TTCATGGCCT AGAAGGAAAT AAAGGCCCCG ATTTCTGGAG TTCTGAGCCT	60
ACTTTTTTTG GGTGCATTTT GAAACATACG GATTTTACCG CTAGTATATT CAGTGAGGAA	120
GGAAGGCTTC TGAAGGATTG ATGATCCCCA AACTGGATTA TGTGTTTCATG ATAATGGTGT	180
ATTTGGTGCC CTAGCATAGT GAGGTGAGGT AGGTCCTTAA AATGGCTCAT TATAACATC	240



ATTGTTCTCTG AGCTCACTTG CCCTTGCATC TCCTGCCAGA GTGCTTTGTA CATAGTAGGC	300
CCTCATCAAT GCTTGTAGAT TTAAATTCG GAGGCACACT TGAAGACAA TGGTGGCTGG	360
TAAATTAATT ATCAGGGTTA GCAACTTCAT TTCTGCTNAC GCTTAAAAAG TGCTGCGCGA	420
GGAAACTCGA G	431

## (2) INFORMATION FOR SEQ ID NO:478:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:478:

GCCTCTGNTT TTAATTCATT GGCAACTGTT ACGATGGAAG ACCTGATTCG ACCTTGGTTC	60
CCTGAGTTCT CTGAAGCCCG GGCCATCATG CTTTCAGAG GCCTTGCCTT TGGCTATGGG	120
CTGCTTTGTC TAGGAATGGC CTATATTTCC TCCCAGATGG GACCTGTGCT GCAGGCAGCA	180
ATCAGCATCT TTGGCATGGT TGGGGGACCG CTGCTGGGAC TCTTCTGCCT TGAATGTTC	240
TTTCCATGTG CTAACCCTCC TGGTGTGTT GTGGCCTGT TGGCTGGGCT CGTCATGGCC	300
TTCTGGATTG GCATCGGGAG CATCGTGACC AGCATGGGCT TCAGCATGCC ACCCTCTCCC	360
TCTAATGGGT CCAGCTTCTC CTGCCCACC AATCTAACC TTGCCACTGT GACCACACTT	420
CTCGAG	426

## (2) INFORMATION FOR SEQ ID NO:479:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:479:

GAATTCGGCC TTCATGGCCT AAATTTTCAG GCAGTTTGAA GTATCTGGCA GAAAAAGTAA	60
ATTGAAATCA TTGGGACGTT GATTTTAAAA TTACCTAGAA GCAATCCCAA TGCTTTATGT	120
AATACTAAAA TTTCTCCTCT CTCTTTTCTT TATCTCTCTC TCCCCTGAAA ATAATCATTT	180
TTTTTCCAGT GCCAGTTCAG ATCTTGGCAA CAGTTGTTTT GAAAAAGTAC CTGAACAAAA	240
TACATTTTAT AAAGTAAAGT ATTCAGGAAC TGACAGAACT GGAGAAGAAT ATATTTATGT	300
TACAGAAGTC ATGGACAACC TCGAG	325

## (2) INFORMATION FOR SEQ ID NO:480:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:480:

GGCAAGTAAC AGGTTGCAAG AATTGGAGGC AGAGCAACAG CAGATCCAAG AAGAAAGAGA	60
ATTACTGTCC AGACAAAAGG AAGCTATGAA AGCAGAGGCA GGCCCAAGTTG AACACAATT	120

ACTACAGGAG	ACAGACAAAT	TAATGAAGGA	AAAAC TAGAA	GTACAATGTC	AAGCTGAAAA	180
AGTACGTGAT	GACCTTCAA	AACAAGTGAA	AGCTCTAGAA	ATAGATGTGG	AAGAACAAGT	240
CAGTAGGTTT	ATAGAGCTGG	AACAAGAAAA	AAATACTGAA	CTAATGGATT	TAAGACAGCA	300
AAACCAAGCA	TTGGAAAAGC	AGTTAGAAAA	AATGAGAAAA	TTTTTAGATG	AGCAAGCCAT	360
TGACAGAGAA	CATGAGAGAG	ATGTATTCCA	ACAGGAAATA	CTCGAG		406

## (2) INFORMATION FOR SEQ ID NO:481:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:481:

GAATTCGGCC	AAAGAGGCCT	AGTCGGTGCC	TCATTGGTAT	AAATGTTATG	TCTGCATGGG	60
TTTTTTCTAC	AATTTCTTTC	TAAGATTATT	TCTCCCCAAA	GCTCAGCACT	TTTGGAATTT	120
TTCATTCTCA	TCCAAAAATG	GAAGCAATTT	TATGTAAATG	TCTCTTGGA	GCAGTGTGG	180
AATTCATATT	TTGGGTAGCA	GAAGCAGTAG	TTACAAGGGT	AGTGGTGTCT	TTTGTGGTGG	240
TGGTGGCACC	TGCTGCAGTT	GTTTCATATT	GGGGTGCAGG	AGTAGGGAGG	GTAGGATCAG	300
TTGGAGAATT	TACAGGGAAA	AATGGAGGTC	CAGGTGGATA	GGGTCTAGAA	TTCAATC	357

## (2) INFORMATION FOR SEQ ID NO:482:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:482:

GAATTCGGCC	AAAGAGGCCT	AAGTGA CTCC	AGAGCCTCCT	GCAAGATGCT	GTTGATTCTG	60
CTGTCA GTGG	CCTTGCTGGC	CCTGAGCTCA	GCTCAGAACT	TAAATGAAGA	TGTCAGCCAG	120
GAAGAATCTC	CCTCCCTAAT	AGCAGGAAAT	CCACAAGGAG	CACCCCCACA	AGGAGGCAAC	180
AAACCTCAAG	GTCCCCCATC	TCCTCCAGGA	AAGCCACAAG	GACCACCCCC	ACAAGGAGGC	240
AACGAGCCTC	AAGGTCCCCC	ACCTCCTCCA	GGA AAACCAC	AAGGACCACC	CCCTATTCTC	300
GAG						303

## (2) INFORMATION FOR SEQ ID NO:483:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:483:

GAATTCGGCC	AAAGAGGCCT	AAGCAGACAC	AATGGTAAGA	ATGGTGCCTG	TCCTGCTGTC	60
TCTGCTGCTG	CTTCTGGGTC	CTGCTGTCCC	CCAGGAGAAC	CAAGATGGTC	GTTACTCTCT	120
GACCTATATC	TACACTGGGC	TGTCCAAGCA	TGTTGAAGAC	GTCCCCGCGT	TTCAGGCCCT	180

TGGCTCACTC	AATGACCTCC	AGTTCTTTAG	ATACAACAGT	AAAGACAGGA	AGTCTCAGCC	240
CATGGGACTC	TGGAGACAGG	TGGAAGGAAT	GGAGGATTGG	AAGCAGGACA	GCCAACTTCA	300
GAAGGCCAGG	GAGGACATCT	TTATGGAGAC	CCTGAAAGAC	ATCGTGGAGT	ATTACAACGA	360
CAGTAACGGG	TCTCACGTAT	TGCAGGGAAG	GTTTGGTTGT	GAGATCGAGA	ATAACAGAAG	420
CAGCGGAGCA	TTCTGGAAAT	ATTACTATGA	TGGAAGGAC	AAACTCGAG		469

## (2) INFORMATION FOR SEQ ID NO:484:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 516 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:484:

GAATTCGGCC	AAAGAGGCCT	ACTACTTCTG	TAGTCTCATC	TTGAGTAAAA	GAGAACCCAG	60
CCAACATATGA	AGTTCCTTGT	CTTTGCCTTC	ATCTTGGCTC	TCATGGTTTC	CATGATTGGA	120
GCTGATTCAT	CTGAAGAGTA	TGGGTATGGC	CCTTATCAGC	CAGTTCAGCA	ACAACCACTA	180
TACCCACAAC	CATACCAACC	ACAATACCAA	CCTGCCTCAA	GGTCCTCCAC	CTCCTCCAGG	240
AAAGCCACAA	GGACCACCCC	CACAAGGAGG	CAACAAACCT	CAAGGTCCCC	CACCTCCAGG	300
AAAGCCACAA	CGACCACCCC	CACAAGGAGG	CAGCAAGTCC	CGAAGTTCTC	GATCTCTCTC	360
AGGAAAGCCA	CAAGGACCAC	CCCCACAAGG	AGGCAACAAA	CCTCAAGGTC	CCCCACCTCC	420
AGGAAAGCCA	CAAGGACCAC	CCCCACAAGG	AGGCAGCAAG	TCCCGAAGTG	CCCCTCTCTC	480
TCCAGGAAAG	CCACAAGGAC	CATCCACAAA	CTCGAG			516

## (2) INFORMATION FOR SEQ ID NO:485:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:485:

GAATTCGGCC	AAAGAGGCCT	ACTTCACTTC	AGCTTCACTG	ACTTCTTGAC	TCTCCTCTTG	60
AGTAAAAGGA	CTCAGCCAAC	TATGAAGTTT	TTTGTCTTTG	CTTTAGTCTT	GGCTCTCATG	120
ATTTCCATGA	TTAGCGCTGA	TTCACATGAA	AAGAGACATC	ATGGGTATAG	AAGAAAATTC	180
CATGAAAAGC	ATCATTCACT	TGGAGAATTT	CCATTTTATG	GGGACTGTGG	ATCAAATTAT	240
CTATATGACA	ATTGATATCC	TTAGTAATCA	TGGGGCATGA	TTATAGAGGT	TTGACTGGCA	300
AATTCACCTT	TACTCATTTA	TTCTCATTCA	TCACACCGCA	AGTCTAGGCC	TCTCGAG	357

## (2) INFORMATION FOR SEQ ID NO:486:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 643 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:486:

```

GGTTACCATC CTCAAAGGAT TGGCTAAAAG CAAGCAACTG GATTGAACAC CCTAAGAAGA      60
AAGATTCACA CTGCACCAGG AGACATCAGA AAGAATGAAA ACTCTGCCGC TGTGTGTGTG      120
CATCTGTGCA CTGAGTGCTT GCTTCTCGTT CAGTGAAGGT CGAGAAAGGG ATCATGAACT      180
ACGTCACAGG AAGGCATCAT CACCAATCAC CCAAATCTCA CTTTGAATTA CCACATTATC      240
CTGGACTGCT AGCTCACCAG AAGCCGTTCA TTAGAAAGTC CTATAAATGT CTGCACAAAC      300
GCTGTTAGGC CTAAGCTTCC ACCTCACCT AATAACCCCC CCAAATTCCC AAATCCTCAC      360
CAGCCACCTA AACATCCAGA TAAAAATAGC AGTGTGGTCA ACCCTACCTT AGTGGCTACA      420
ACCCAAATTC CATCTGTGAC TTTCCCATCA GCTTCCACCA AAATTACTAC CCTTCCAAAT      480
GTGACTTTTC TTCCCAGAA TGCCACCACC ATATCTTCAA GAGAAAATGT TAACACAAGC      540
TCTTCTGTAG CTACATTAGC ACCCAGTGAA TTCCCAGCT CCACAAGACA CCACAGCTGC      600
CCCACCACA CCTTCTGCAA CTACACCAGC TCCACCCCTC GAG                          643

```

## (2) INFORMATION FOR SEQ ID NO:487:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:487:

```

GAATTCGGCC AAAGAGGCCT ACAAGATGCT GCTGGTCCTG CTCTCAGTGG TCCTTCTGGC      60
TCTGAGCTCA GCTCAGAGCA CAGATAATGA TGTGAACTAT GAAGACTTTA CTTTCACCAT      120
ACCAGATGTA GAGGACTCAA GTCAGAGACC AGATCAGGGA CCCAGAGAC CTCCTCCTGA      180
AGGACTCCTA CCTAGACCCC CTGGTGATAG TGGTAACCAA GATGATGGTC CTCAGCAGAG      240
ACCACCAAAA CCAGGAGGCC ATCACCGCCA TCCTCCCCCA CCTCCTTTTC AAAATCAGCA      300
ACGACCACCC CAACGAGGAC ACCGTCATC TCGAG                          335

```

## (2) INFORMATION FOR SEQ ID NO:488:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:488:

```

GAATTCGGCC AAAGAGGCCT AGACACATTG CCTTCTGTTT TCTCCAGCAT GCGCTTGCTC      60
CAGCTCCTGT TCAGGGCCAG CCCTGCCACC CTGCTCCTGG TTCTCTGCCT GCAGTTGGGG      120
GCCAACAAAG CTCAGGACAA CACTCGGAAG ATCATAATAA AGAATTTTGA CATTCCCAAG      180
TCAGTACGTC CAAATGACGA AGTCACTGCA GTGCTTGCAG TTCAAACAGA ATTGAAAGAA      240
TGCATGGTGG TTAAAACTTA CTCATTAGC AGCATCCCTT CTACAAGGTG CATTAACTA      300
TAAGTATAAC TGCCAACCTC GAG                          323

```

## (2) INFORMATION FOR SEQ ID NO:489:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:489:

GAATTCGGCC AAAGAGGCCT AGTGACACCA GAGCCTCCTG CAAGATGCTT CTGATTCTGC	60
TGTCAGTGGC CCTGCTGGCC TTCAGCTCAG CTCAGGATTT AAATGAAGAT GTCAGCCAGG	120
AAGATGTT	128

## (2) INFORMATION FOR SEQ ID NO:490:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:490:

GAATTCGGCC AAAGAGGCCT AATTTTGACC AGCAGATTAA TCAACTGTAA GACGGATCCT	60
CACACAAAGA GGCAACTGAA AGGATGAAAT CACTGACTTG GATCTTGGGC CTTTGGGCTC	120
TTGCAGCGTG TTTCACACCT GGTGAGAGTC AAAGAGGCCC CAGGGGACCA TATCCACCTG	180
GACCGCTGGC TCCTCCTCAA CCTTTTGGCC CAGGATTGT TCCACCACCT CCTCCTCCAC	240
CCTATGGTCC AGGGAGAATC CCACCTCCTC CTCTGCAGAG AAAACCTTTG AAGAAAAGCA	300
GGAACAGAGA TCGATGGCGA TCTATTCCC TGTACTATAC TGGAGAGAAA GGTCAAAATC	360
CTCGAG	366

## (2) INFORMATION FOR SEQ ID NO:491:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:491:

GGTTTCCCGT TTGTCCCTCC TTCAAGGTTT TTTTCAGCAG CTGCAGCACC CGCTGCCCCA	60
CCTATTGCAG CTGAGCCTGC TGCAGCTGCA CCTCTTACAG CCACACCTGT AGCAGCTGAG	120
CCTGCTGCAG GGGCCCCTGT TGCAGCTGAG CCTCCTGCAG AGGCACCTGT TGGAGCTGAG	180
CCTGCTGCAG AGGCACCTGT TGCAGCTGAG CCTGCTGCAG AGGCACCTGT TGGAGTGGAG	240
CCAGCTGCAG AGGAACCTTC ACCAGCTGAG CCTGCTACAG CCAAGCCTAG GCCTCT	296

## (2) INFORMATION FOR SEQ ID NO:492:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:492:

CTCGAGTCCT TGTGGCTTTC CTGGAGGTGG GGGACCTTGA GGTTTGTGTC CTCCTTGTGG	60
GGGTGGTCCT TGTGGCTTTC CTGGAGGAGG TGAAGGACCT TGAGGCTGGT TGCCTCCTTG	120

```

TGGGGGTGGT CCTTGTGGCT TTCCTGGAGG AGATCGGGGA CTCGGGGAC TTGTCTCCTT      180
GTGGGGGTGG TCCTTGTGGC TTTCCTGGAG GTGGGGGACC TTGAGGTTG TTGCCTCCTT      240
GTGGGGGTGG TCCTTGTGGC TTTCCTGGAG GAGGTGGGGG ACCTTGAGGC TGGTTGCCTC      300
CTTGTGGGGG TGGTCCTTGT GGCTTTCCTG GAGGAGATGG GGGACCTGA GGTTCCTTGC      360
CTCCTTGTGG GGGTGCTCCT TGTGGATTTC CTGCTATTAG GGAGGGAGAT TCTTCCTGGC      420
TGACATCTTC ATTTAAGTTC TGAGCTGAGC TCAGGGCCAG CAGGGCCACT GACAGCAGAA      480
TCAACAGCAT CTTGCAGGAG GCTCTGGAGT CACTTAGGCC TCTTTGGCCG AATTC          535

```

## (2) INFORMATION FOR SEQ ID NO:493:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:493:

```

GAATTCGGCC AAAGAGGCCT AGTCGGTAAT CACAACAAAC ACGGAGCAAT CTCAATGCTG      60
TTTATCCGGA GGACAGTCTG CGGGGTCGTG ACGATTCTTT TCTTCTTGAA GTTTTTCCTT      120
TTCCTGAATC TCATAATGAT TCTTGGCCAT GATTCTGTCT TTTCAATGAC TGTGGCTTCT      180
ACTCGAACAA GATCCTTTCC GAGGAGTGGC TTGCCAAGCA GCGTGAAGTT GTCTGCCCCA      240
ACCAGCAGGA CTTTCTCCAG TCGAATTCTC TCTCCACACG CAAGGTCTAG TTCATTTCCT      300
ATTAAGATCA GGTCTTCAGA G                                     321

```

## (2) INFORMATION FOR SEQ ID NO:494:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:494:

```

GAATTCGGCC AAAGAGGCCT AACCTGCCTT GGTCTTGTCT CCTCTTTCCA CGTTGGATAA      60
CAATTTTTTG GTTGTTTTGT TTAAGTTGGT GCTCTGAAGC TTAATCTCAG TACCCCTTAC      120
TCTGAATTGT CAAATTTTGA TAAACGTGC CATTTTCTTT GGTAAGAGAA AGCAGGTCTT      180
AATGTCTGCC AGAACACAAT TTATATGCCT TATTGGCTTC ATTAACTTT TAGAAAACCT      240
TAGCATTTGT TACTTTTTTC CATTGCATTT ACTTTCAAAT GCACCTAATG AATTCGTCAC      300
CCAGTCGCAA CTTTTCCTT CTCTGTCCCA TTGCTTTCTC CTTTCCCCAA CGCAGCTCGA      360
G                                     361

```

## (2) INFORMATION FOR SEQ ID NO:495:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:495:

```

GAATTCGGCC AAAGAGGCCT AAAGCGACCA AGATAAAAGT GGACAGAAGA ATAAGCGAGA      60
CTTTTTATCC ATGAAACAGT CTCCTGCCCT CGCTCCGAA GAGCGCTACC GCAAAGCCGG      120
GTCCCCAAAG CCGGTCTTGA GAGCTGATGA CAATAACATG GGCAATGGCT GCTCTCAGAA      180
GCTGGCGACT GCTAACCTCC TCCGGTTCCT ATTGCTGGTC CTGATTCCAT GTATCTGTGC      240
TCTCGTTCTC TTGCTGGTGA TCCTGCTTTC CTATGTTGGA ACATTACAAA AGGTCTATTT      300
TAAATCAAAT GGGAGTGAAC CTTTGGTCAC TGATGGTGAA ATCCAAGGGT CCGATGTTAT      360
TCTTACAAAT ACAATTTATA ACCAGAGCAC TGTGGTGTCT ACTGCACATC CCGACCAACT      420
AGGCCTCTTT GGCCG                                     435

```

## (2) INFORMATION FOR SEQ ID NO:496:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 122 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:496:

```

GAATTCGGCC AAAGAGGCCT AGAAATATAT TTTCTAGTGA ATTCTTATTG GAAGCCAGGT      60
CTCTCCTCTC ATTAGATCAA AAGGGACTTA TGTACATACA ACAATTGAAA GTGTTACTCG      120
AG                                     122

```

## (2) INFORMATION FOR SEQ ID NO:497:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:497:

```

GAATTCGGCC AAAGAGGCCT AAGAAAATCA GCCTGTCTGC TCTCTCCTTG GCTCAACAAG      60
GCCTCTAACA GTCTTCTGTC CTCTATTCTG CACACGGCAT ATTTGGGAAC GAGAAACAAA      120
AGTTTTCCCA AATGAAGAGA ACTCACTTGT TTATTGTGGG GATTTATTTT CTGTCTCTTT      180
GCAGGGCAGA AGAGGGGCTT AATTTCCCA CATATGATGG GAAGGACCGA GTGGTAAGTC      240
TTTCCGAGAA GACCCTCGAG                                     260

```

## (2) INFORMATION FOR SEQ ID NO:498:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 48 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:498:

```

GAAAGAGGCC TACCAACATG CCAGAGGCCG TACCCATATC CGCAGCAG      48

```

## (2) INFORMATION FOR SEQ ID NO:499:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 276 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:499:

```
GAATTCGGCC TTCATGGCCT ACCCTGTCAA AATTTTGCCT CCTCTTGATT TTCAATATAT      60
ATATATTTTT TTGTCTTACT CTGTTGCCCA GGCTAGAGTG CAGTGACGTG ACCTTGGCTC      120
ACTGCAACCT CTGCCTCCTG GGCTCAAGCA ATCCTCCAC CTCAGCCTCC TCAGTAGCTG      180
GGACCACAGG CATATGCTAC AAAGCCCAGA TTATTTTTTT ATAGAAACAG GGTTCACCA      240
TGTGCCCAG GCTTGCTCTG AACCCAGAA CTCGAG      276
```

(2) INFORMATION FOR SEQ ID NO:500:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 301 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:500:

```
GAATTCGGCC TTCATGGCCT ACAAATGCC ATCAAAGACT GGATAAAGAA AATGTAGTAT      60
ATATATATAT ACCATGGAAT ACTGTGCAGC CATAAAAAAG GAATGAGATC ATGTGTTTCA      120
CAGGGATGTG GATGAAGCTG GAAGCCATCA TCCCCAGCAG ACTAACACAG GAACAGAAAA      180
CCAAACACTG CATGTTCTCA CTCATAAGTG GGAGCTGAAC AATGAGAACA GGTGGGCACA      240
GGGACGGGAA CAACACACAC CAGGGCCTGT TGTGTGGTGG GGGTGAGGGT TGGAACTCGA      300
G      301
```

(2) INFORMATION FOR SEQ ID NO:501:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:501:

```
GCGAGGCAGG GAAACTCACT TCACGTCTCT TTCCTTGTAG AGCATCATGC TTATTTCTGG      60
CTCACTCACA TCTTTGTCTC GGGAGTTCTC TGCCGAGCCA TTGCCCCCTA CAGCAGAGAG      120
CACAGCTGGC TGCACTAGTG CTGAAGGAGC CAGCCCCAGA GCAGGGCATT TCCAGGGGCT      180
CTTGTCCTAG AGCGGCAGGC GTTGTGTGCA GAGAACGCCC CTCCACGCA GCACAGAGAA      240
CGCGGGGTGG GTGTGTGGCT CCGGGCCTGT GGGGCTTAGG CTGCCTGAAC CACCGCCGAC      300
TGGCACCATG ACTCGGCATT CCTGGAAGTG CCTTACCAAG TTGTTGTTGT TGTTTTGTG      360
TTTTTAAGA GACGGGCTTG CTCTATCATC CAGGCTCGAG      400
```

(2) INFORMATION FOR SEQ ID NO:502:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 286 base pairs



(B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:502:

GAGATAAACA	AAATTGATTG	CCCCATTCTC	TCACTTCCCC	ATCTTGCTCT	CCTAGACCCC	60
ACAGAGTTAA	AACTTGGGAT	TCCCCTGGCC	CCCCCAGAAC	ACTTGTATAT	TGTTTGTGTTG	120
AGGTTCTGTC	CGCAGTAACA	GACACAGTAT	TTAATTGCAC	ATACAGATGT	TTGCTGGGTA	180
TATTCACGTG	AAATTTTATT	TAATCTGTTT	TTTTGTTTGT	TTGGGGGTTA	TTTGGGGGGA	240
GGTTGGTTTT	GTTTTTAAAT	ATAAAAAAAA	AAATCTGTCA	CTCGAG		286

(2) INFORMATION FOR SEQ ID NO:503:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 279 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:503:

GGCCTCACCT	TACCCAGGA	CTCCGCTATG	ACACCGCCTC	TGCCCCCTACA	AGACACAGAT	60
CTCTCGTCAG	CCTCAAAGCC	TGTGGCTGCA	GCCACGCCTG	TGTCCCAGCA	GGCTGAAGAG	120
GGCCTCACCT	TACCCAGGA	CTCCGCTATG	ACAGCACCTC	TGCCTCTGCA	AGACACAGGC	180
CCCACCTCAG	GTCCAGAGCC	TCTGGCTGTG	GCCACCCCTC	AAACCTTGCA	GGCAGAAGCA	240
GGCTGTGCCC	CAGGGACAGA	GCCTGTGGCC	ATACTCGAG			279

(2) INFORMATION FOR SEQ ID NO:504:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 306 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:504:

GCAATGGCAG	GAATTCGAAA	TATTGGCATA	TGTTCTTTT	GGATTAGATT	ATATAAAATC	60
AGAAGAGGTA	GAACCAGGCC	CCAAGCACTC	CTTTTCTCT	GCATGATACT	TCTGCTTATT	120
GTCCTTCACA	CTAGCTACAT	GATTTATAGT	CTTGCTCCCC	AATATGTTAT	GTATGGAAGC	180
CAAAATTACT	TAATAGAGAC	TAATATAACT	TCTGATAATC	ATAAAGGCAA	TTCAACCCTT	240
TCTGTGCCAA	AGAGATGTGA	TGCAGAAGCT	CCTGAAGATC	AGTGTAAGT	TACCCGGACG	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:505:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 361 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:505:

```
GAATTCGGCC TTCATGGCCT AAGGAGAATG GCGTGCACCC GGGAGGCGGA GCTTGCACTG      60
AGCCAACATC ACGCCACTGC ACTCCAGCCC GGGCGACTGA GCGAGACTCT CTCTCNAAAA      120
AAAAAAAAAA AAAGAAAAAG AAAAAGAAAA AGAAAAAGAA AAGAAAATAT ATANATACAC      180
ACAGAGAGTG AGAGAGAGAG AGAGAGAGAG ACCAGAAAAA GAGAGAAGGA GAAAGAGAGA      240
ATGCAAAAAC CAAGAGGANA GAATGATCCA CTCTCCAACCT AGAAAGGTAG CTCTCAATCT      300
GAAAAGTCAC TTGATTACTT TGTCTATTTT GCTTATCTGC TACATCAATG GTTCCCTCGA      360
G                                                                                   361
```

(2) INFORMATION FOR SEQ ID NO:506:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:506:

```
GAATTCGGCC TTCATGGCCT AGGCCTTTTC TTTTAAAGG AATTCAAGCA GGATACGTTT      60
TTCTGTGGG CATTGACTAG ATTGTTTGCA AAAGTTTCGC ATCAAAAACA ACAACAACAA      120
AAAACCAAAC AACTCTCCTT GATCTATACT TTGAGAATTG TTGATTCTT TTTTATTTC      180
TGACTTTTAA AAACAACTTT TTTTCCACT TTTTAAAAA ATGCACTACT GTGTGCTGAG      240
CGCTTTTCTG ATCCTGCATC TGGTCACGGT CGCGCTCAGC CTGTCTACCC GCAGCACACT      300
CGAG                                                                                   304
```

(2) INFORMATION FOR SEQ ID NO:507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:507:

```
GGGGCTGCGG GGATTGACCT CCTCACTTCT GGGTTGCCAC TCGAAGCTTG CTCCGGGCAA      60
CGACCCTGCT GCTTCCCAGA GGGAAACTGT AGCCACAGAG CCAGGAGAGA AGCCAAAGCA      120
CCTGCTCCAC GTCCACATCA CCCAGGCTT CTAGCCCCCA GGGGCTTCAT CAGTGCTTCA      180
GCGCTCTCTC CCATCCCCCA CTCCCATGT CCTCGTGAT CCGAACTCCT AGGGCTCCGT      240
GTCCACAGG TCACCACTTC CGGCTGTCTC GAG                                                                                   273
```

(2) INFORMATION FOR SEQ ID NO:508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:508:

GAATTCGGCC	TTCATGGCCT	ACATCAATAA	AATACATTCT	ACACAGAATA	CGCCAACCAT	60
ACACTACTCT	TTTTTGATAA	TAAAAAATGT	ATTTACTGAG	CCAGTTGTGG	TGGCTCGCGC	120
CTATAATCCC	AGCACCTTGG	AAGGCCAATG	GGAGTGGATC	GGTTGAGGCC	AGGAGTTTGA	180
GACCGGCCTG	GCCAACATGG	TGGAATGCCG	TCTCTACTGA	GAATGCAGAA	ATGAGCCGGG	240
CACGGTGGCA	CGCACCTGTA	GTCCCAGGTA	CTCCGATTCC	TCTCGAG		287

## (2) INFORMATION FOR SEQ ID NO:509:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:509:

AAGAGGCGAT	GGCGGCGATG	GCATCTCTCG	GCGCCCTGGC	GCTGCTCCTG	CTGTCCAGCC	60
TCTCCCGCTG	CTCAGCCGAG	GCCTGCCTGG	AGCCCCAGAT	CACCCCTTCC	TACTACACCA	120
CTTCTGACGC	TGTCATTTCC	ACTGAGACCG	TCTTCATTGT	GGAGATCTCC	CTGACATGCA	180
AGAACAGGGT	CCAGAACATG	GCTCTCTATG	CTGACGTCGG	TGAAAAACAA	TTCCCTTGTC	240
CACTCGAG						248

## (2) INFORMATION FOR SEQ ID NO:510:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:510:

GGCGATGATT	AGGCCAGACC	CTCCCCATCC	TCGTGAGGGC	CAGAAGCTGT	TGCTACACTG	60
TGAGGGTCGC	GGCAATCCAG	TCCCCAGCA	GTACCTATGG	GAGAAGGAGG	GCAGTGTGCC	120
ACCCCTGAAG	ATGACCCAGG	AGAGTGCCCT	GATCTTCCCT	TTCTCAACA	AGAGTGACAG	180
TGGCACCTAC	GGCTGCACAG	CCACCAGCAA	CATGGGCAGC	TACAAGGCCT	ACTACACCCT	240
CAATGTTAAT	GACCCAGTC	CGGTGCCCTC	CTCCTCCAGC	ACCTACCACG	CCATCATCGG	300
TGGGATCGTG	GCTTTCATTG	TCTTCTGCT	GCTCATCATG	CTCATCTTCC	TCGGCCACTA	360
CTTGATCCGG	CACAAAGGAA	CCTACCCTAC	ACTCGAG			397

## (2) INFORMATION FOR SEQ ID NO:511:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:511:

```

GCCTGCCTCC AGGCCTTTGC TCCCACTGTT GCCTCCACTT AGAATAACAT TCCACCCCAT      60
CTCTATAAAT ATCCTACAGA CAAATACTAC CTTCCCCCTTA AGGCCAGTTC TAACCCTAAC      120
TGACAACAAA TCATCTCTAC ATGATCTTTT CCTTCTGGGA ATGCCTGCAG CACTGTTTAA      180
TCCTGCCCCA CCACCATCCC CTCACCCAGC ACCCTCTCCC AGACCAGACA GGGTGGCTCA      240
TGCCTGCAAT CCCAGCACCT TGGGAGGCTG AGGCAGGAGG ATTGCTCGAG      290

```

## (2) INFORMATION FOR SEQ ID NO:512:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 304 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:512:

```

GAATTCGGCC TTCATGGCCT ACTATGCCGT CATGATAGAG AAGATGATCC TGAGAGACCT      60
GTGCCGTTTC ATGTTTGTCT ACGTCGTCTT CTTGTTCGGG TTTTCCACAG CGGTGGTGAC      120
GCTGATTGAA GACGGGAAGA ATGACTCCCT GCCGTCTGAG TCCACGTCGC ACAGGTGGCG      180
GGGGCCTGCC TGCAGGCCCC CCGATAGCTC CTACAACAGC CTGTACTCCA CCGTGCCTGGA      240
GCTGTCAAG TTCACCATCG GCATGGGCGA CCTGGAGTTC ACTGAGAACC ATGAATTCTT      300
CGAG                                         304

```

## (2) INFORMATION FOR SEQ ID NO:513:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 314 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:513:

```

GAATTCGGCC TTCATGGCCT AGGAACCTGG ACCGCGGCGG CGCCGGGTTT CCCTCATGAT      60
CCCGGGCGGG CGGCGGCGGC GGCAGAGGCG GCGGGAGGAT GACCTCTTAC CGGGAGCGGA      120
GTGCCGACCT GGCCCGTTTC TACTGTGCA CCGAGCCCCA GCGACACCCG AGGGGCTACA      180
CAGTATATAA GGTACCGGCC CGGGTTGTTT CACGAAGAAA TCCAGAGGAT GTCCAGGAGG      240
GAGAATCCTG AACCAACCTA TCCATGAACA TACTCTCTGC CATTTTCTTA GTCCTTTTTT      300
CGGAAAAACT CGAG                                         314

```

## (2) INFORMATION FOR SEQ ID NO:514:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 529 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:514:

```

GAATTCGGCC TTCATGGCCT ACGAACTTAA GAAAATGAGA CTGAGCAATC TCATGGTTCT      60
TGGACAGTTA GTCTATGGCC AATTGATGGA ACCAGTAAAT CGAGAGAACT TTACGCAGAC      120
CTTGCCCAA ATGCCAATTC ATTCTCATGC ACAGCCCCCA GATGCCAGGG AAGAGGATAT      180

```

CATACTTGAA	GGTCAACAGA	GCCTGCCATC	CCAGGCTTCA	GATTGGAGCC	GATACTCAAG	240
CAGCTTACTG	GAATCCGTCT	CTGTTCTCTG	AACACTAAAT	GAGGCTGTTG	TAATGACTCC	300
ATTTTCATCG	GAAC TTCAAG	GAATTT CAGA	ACAGACCCTC	CTGGAGCTGT	CCAAAGGAAA	360
GCCCTCCCCG	CATCCCAGAG	CCTGGTTTGT	GTCTCTTGAT	GGAAAGCCAG	TTGCACAAGT	420
GAGGCACTCC	TTTATAGACC	TGAAAAAGGG	CAAGAGAACC	CAGAGCAATG	ACACCAGTCT	480
GGACTCTGGG	GTGGACATGA	ATGAGCTTCA	CTCAAGTAGA	AAGCTCGAG		529

## (2) INFORMATION FOR SEQ ID NO:515:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:515:

GGAGATGAAA	GT TAAAAGTG	AAAACCTTAA	AGAGGAGCCT	CAGTCTTCTG	AAGAAGAATC	60
TATGTCTTCT	GTGGAAACCA	GGACACTAAT	AAAATCTGAG	CCTGTAAGTC	CAAAGAATGG	120
TGTTTTACCA	CAGGCTACTG	GAGACCAGAA	ATCTGGTGGA	AAATGTGAAA	CAGACAGACG	180
CATGGTTGCA	GCCAGAACAG	AACCCCTAAC	TCCAAACCCA	GCTTCTAAGA	AACCAGAGT	240
CCACAAAAGG	GGATCAGAAT	CTAGTTCTGA	TTCTGACTCA	GATTCTGAGA	GATCATCTTG	300
TTCTTCCAGA	TCATCTTCTT	CCTCATCATC	CTCTTCTTGT	CCCCTCTCG	AG	352

## (2) INFORMATION FOR SEQ ID NO:516:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 500 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:516:

GTCTACACCN	TTCCGAGTTG	GCTGCAGATT	TGTGGTGCCT	TCTGAGCCGT	CTGTCCTGCC	60
CCAAGATGCT	TCAAAGTATT	ATTAAAAACA	TATGGATCCC	CATGAAGCCC	TACTACACCA	120
AAGTTTACCA	GGAGATTTGG	ATAGGAATGG	GGCTGATGGG	CTTCATCGTT	TATAAAATCC	180
GGGCTGCTGA	TAAAAGAAGT	AAGGCTTTGA	AAGCTTCAGC	GCCTGCTCCT	GGTCATCACT	240
AACCAGATTT	ACTTGAGTA	CATGTGAAAG	AAAACGTCAG	TCTGCCTGTA	AATTTAGCA	300
AGCCGTGTTA	GATGGGGAGC	GTGGAACGTC	ACTGTACACT	TGTATAAGTA	CCGTTTACTT	360
CATGGCATGA	ATAAATGGAT	CTGTGAGATG	CACTGCTACC	TGGTACTGCT	TTCAGTGTGT	420
TCCCCCTCAG	CCCCTCCGGC	GTGTCAGGCA	TACTCTGAGT	AGATAATTTG	TCATGCAGCG	480
CATGCAATCA	GAATCTCGAG					500

## (2) INFORMATION FOR SEQ ID NO:517:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:517:

GAATTCGGCC	TTCATGGCCT	AGATGCTCAA	CACCTCCTCC	TTGGTGGAGC	AGCTGAACGA	60
GCAGTTTAAC	TGGGTGTCCC	GGCTGGCAAA	CCTCACGCAA	GGCGAACACC	AGTACTATCT	120
GCGGGTCACC	ACGGTGGCTT	CCCACACTTC	TGACTCGGAC	GTTCTTTCCG	GTGTCACTGA	180
GGTGGTCGTG	AAGCTCTTTG	ACTCTGATCC	CATCACTGTG	ACGGTCCCTG	TAGAAGTCTC	240
CAGGAAGAAC	CCTAAATTTA	TGGAGACCGT	GGCGGAGAAA	GCNCTGCAGG	AATACCGCAA	300
AAAGCACCGG	GAGGAGTGAG	ATGTGGATGT	TGCTTTTGCA	CCTACGGGGG	CATCTGAGTC	360
CAGCTCCCCC	CAAGATGAGC	TGCAGCCCCC	CAGAGAGAGC	TCTGCACGTC	ACCAAGTAAC	420
TCTCGAG						427

## (2) INFORMATION FOR SEQ ID NO:518:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 399 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:518:

GAATTCGGCC	TTCATGGCCT	AATCTTAAGG	GACCTTTCCT	TACTACAGAT	TCAAATGCGA	60
GATCTTGAGG	GTTACAGGGA	AACGAGGTAT	CAGTTACTTC	AGCTTCGACC	TGCGCAGAGA	120
GCATCATGGA	TTGGTTATGC	TATTGCTTAC	CATTATTAG	AAGATTATGA	AATGGCAGCA	180
AAGATTTTAG	AAGAATTTAG	GAAAACACAA	CAGACATCCC	CTGACAAGGT	GGATTATGAA	240
TATAGTGAAC	TACTCTTATA	TCAGAATCAA	GTTCTTCGGG	AAGCAGGTCT	CTATAGAGAA	300
GCTTTGGAAC	ATCTTTGTAC	CTATGAAAAG	CAGATTTGTG	ATAAACTTGC	TGTAGAAGAA	360
ACCAAAGGGG	AACTTCTGTT	GCAACTATGT	CGTTTGGA			399

## (2) INFORMATION FOR SEQ ID NO:519:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 399 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:519:

GAATTCGGCC	TTCATGGCCT	ACTTATCTTA	ATCCAATGGG	TGACATCTTC	AACAACCCTG	60
TTCCAAATAA	GGCTGCATTC	TAAACACTAG	GGATTAAGAC	ATCAACATGT	GAATTTTGGA	120
GGAATGTAGT	TCTAACCATA	ACAGCAGTGA	ATGAGATGAC	AGACTATTGC	TCTCAAAGA	180
TAGCCAGGTT	TCTAGTTTCC	TTAGGCATT	TCTGGAGGTT	TGCGAGCAGT	TCATTATTAT	240
CTTAAAAATA	TTATCCAGAG	CTGTGGTCTA	TCAGCAGCTC	ATTACCAGAC	TGGCAGATAC	300
ATTTAATCAG	CAAAAGAGTT	GTTCTGTGA	TTAGCATCCT	CCTGGTTTCC	CAGCTCAAGA	360
GTTCTTCTGA	GTAATAGTAA	TCCTTCCCCC	ATGCTCGAG			399

## (2) INFORMATION FOR SEQ ID NO:520:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 273 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:520:

```

GCTGAAGTGG TGA CTTTGA GAGAGGACAC AAAATTATCA TCAGCTCCAG TCGGAGAATC      60
CAGAAAGGAG AAGAGGTAAG AGTGTGAGAG ATTGCATCTG CCATGTTGTT CAGATCCTGG      120
GCGAATAGTT CCCTCCTCAC ACAGGTCAC TACTCACTTG TTTCCCAATT CTTTGTGTG      180
ATAAAAACTC TGTCCATAAT AGGCCAGATG TTCCACCCT GCAGTATCTC ACCCTTCAGG      240
CACTCCAGTT CACCTTCCTC CACATCCCTC GAG                                     273

```

## (2) INFORMATION FOR SEQ ID NO:521:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:521:

```

GCTTTAAGAA TTAACGAAAG CAGTGTCAAG ACAGTAAGGA TTCAAACCAT TTGCCAAAAA      60
TGAGTCTAAG TGCATTACT CTCTCCTGG CATTGATTGG TGGTACCAGT GGCCACTACT      120
ATGATTATGA TTTTCCCCTA TCAATTTATG GGCAATCATC ACCAACTGT GCACCAGAAT      180
GTAACGCCC TGAAGCTAC CCAAGTGCCA TGTACTGTGA TGAGCTGAAA TTGAAAAGTG      240
TACCAATGGT GCCTCCTGGA ATCAAGTATC TTTACCTTAG GAATAACCAG ATTGACCATA      300
TTGATGAAAA GGCCGCACTC GAG                                     323

```

## (2) INFORMATION FOR SEQ ID NO:522:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:522:

```

GGAAAAAGAA GAGAAAGCCA AGGAAGACAA GGGCAAACAA AAGTTGAGGC AGCTTCACAC      60
ACACAGATAC GGAGAACCAG AAGTGCCAGA GTCAGCATTC TGGAAGAAAA TCATAGCATA      120
TCAACAGAAA CTTCTAACT ATTTTGCTCG CAACTTTTAC AACATGAGAA TGTTAGCCTT      180
ATTGTGCGCA TTTGCTATCA ATTTATCTT GCTCTTTTAT AAGGTCTCCA CTTCTTCTGT      240
GGTTGAAGGA AAGGAGCTCC CCACGAGGCT CGAG                                     274

```

## (2) INFORMATION FOR SEQ ID NO:523:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:523:

```

GCCCCAGTCC AGATCCAGGA CTGAGATCCC AGAACCATGA ACCTGGCCAT CAGCATCGCT      60
CTCCTGCTAA CAGTCTTGCA GGTCTCCCGA GGGCAGAAGG TGACCAGCCT AACGGCCTGC      120
CTAGTGGACC AGAGCCTTCG TCTGGACTGC CGCATGAGA ATACCAGCAG TTCACCCATC      180

```

CAGTACGAGT TCAGCCTGAC CCGTGAGACA AAGAAGCACG TGCTCTTTGG CACTGTGGGG 240  
GTGCCTGAGC ACACATACCG CTCCTCCTC GAG 273

## (2) INFORMATION FOR SEQ ID NO:524:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:524:

GAATTCGGCC TTCATGGCCT ACTCTCCTAT AAAGCAGACG CCGCGCCGCG CTGCGACGCT 60  
GTAGTGGCTT CGTCTTCGGT TTTCTCTTC CTTCGCTAAC GCCTCCCGGC TCTCGTCAGC 120  
CTCCCGCCGG CCGTCTCCTT AACACCGAAC ACCATGCCTT CAATTAAGTT GCAGAGTTCT 180  
GATGGAGAGA TATTTGAAGT TGATGTGGAA ATTGCCAAAC AATCTGTGAC TATTAAGACC 240  
ATGTTGGAAG ATTTGGGAAT GGATGATGAA GGAGATGATG ACCCAGTTCC TATACCAAAT 300  
GTGAATGCAG CAATATTAAA AAAGTTCATT CAGTGGTGCA CCCACCACAA GGATGACCCT 360  
CCTCCTCCTG AAGATGATGA GAACAAAGAA AAGCGAACAG ATGATATCCC TGTTTGGGAC 420  
CAAGAATTCC TGAAAGTTGA CTAAGGAACA CTCGAG 456

## (2) INFORMATION FOR SEQ ID NO:525:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:525:

GAATTCGGCC TTCATGGCCT AATGGGACAA CTCCTCGCCC TCTACCTGTC CCCTCCCCCT 60  
TTGGTTGTAT GATTTTCTTC TTTTTTAAAG ACCCTGGAA GCAGCGCCTC CTTCAGGGTT 120  
GGCTGGGAGC TCGGCCCATC CACCTCTTGG GGTACCTGCC TCTCTCTCTC CTGTGGTGTC 180  
CCTTCCCTCT CCCATGTGCT CGGTGTTTCTG TGGTGTATAT TTCTTCTCCC AGACATGGGG 240  
CACACGCCCC AAGGGACATG ATCCTCTCCT TAGTCTTAGC TCATGGGGCT CTTTATAAGG 300  
AGTTGGGGGG TAGAGGCAGG AAATGGGAAC CGAGCTGAAG CAGAGGCTGA GTTAGGGGGC 360  
TAGAGGACAG TGCTCCTGGC CACCCAGCCT CTGCTGAGAA CCATTCCTGG GATTAGAGCT 420  
GCCTTTCCCA GGGAAAAAGT GTCCGACTCG AG 452

## (2) INFORMATION FOR SEQ ID NO:526:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:526:

GCGATTGAAT TCTAGACCAG ACTCGTCTCA GGCCAGTTGC AGCCTTCTCA GCCAAACGCC 60  
GACCAAGGAA AACTCACTAC CATGAGAATT GCAGTGATT TCTTTTGCCT CCTAGGCATC 120



```

ACCTGTGCCA TACCAGTTAA ACAGGCTGAT TCTGGAAGTT CTGAGGAAAA GCAGCTTTAC      180
AACAAATACC CAGATGCTGT GGCCACATGG CTAAACCCTG ACCCATCTCA GAAGCAGAAT      240
CTCCTAGCCC CACAGACCCT TCCAAGTAAG TCCAACGAAA GCCATGACCA CATGGATGAT      300
ATGGATGATG AAGATGATGA TGACCATGTG GACAGCCAGG ACTCCATTGA CTCGAATCGA      360
CTCGAG                                         366

```

## (2) INFORMATION FOR SEQ ID NO:527:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:527:

```

GCCCCAGTCC AGATCCAGGA CTGAGATCCC AGAACCATGA ACCTGGCCAT CAGCATCGCT      60
CTCCTGCTAA CAGTCTTGCA GGTCTCCCGA GGGCAGAAGG TGACCAGCCT AACGGCCTGC      120
CTAGTGGACC AGAGCCTTCG TCTGGACTGC CGCCATGAGA ATACCAGCAG TTCACCCATC      180
CAGTACGAGT TCAGCCTGAC CCGTGAGACA AAGAAGCACG TGCTCTTTGG CACTGTGGGG      240
GTGCCTGAGC ACACATACCG CTCCCGAACC AACTTCACCA GCAAATACAA CATGAAGGTC      300
CTCTACTTAT CCGCCTTCAC TAGCAAGGAC GAGGGCACCT ACACGTGTGC ACTCCACCAC      360
TCTGGCCATT CCCCACCCAT CTCTCCCGA AACGTTACAG TGCTCGAG                     408

```

## (2) INFORMATION FOR SEQ ID NO:528:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:528:

```

GTAGGTCACA GCAGAAGCAG CCAAAATGGA TCCCCAGTGC ACTATGGGAC TGAGTAACAT      60
TCTCTTTGTG ATGGCCTTCC TGCTCTCTGG TGCTGCTCCT CTGAAGATTC AAGCTTATTT      120
CAATGAGACT GCAGACCTGC CATGCCAATT TGCAAACCTCT CAAAACCAAA GCCTGAGTGA      180
GCTAGTAGTA TTTTGGCAGG ACCAGGAAAA CTGGTTCTG AATGAGGTAT ACTTAGGCAA      240
AGAGAAATTT GACAGTGTTT ATTCCAAGTA TATGGGCCGC ACAAGTTTTG ATTCCGACAG      300
TTGGACCTTG AGACTTCACA ATCTTCAGAT CAAGGACAAG GGCTTGATC AATGTATCAT      360
CCATCACAAA AAGCCACAG GAATGATTCG CATCCACCTC GAG                          403

```

## (2) INFORMATION FOR SEQ ID NO:529:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:529:

```

GAATTCCTCT TCTTTACCCT CGTCCTGCCG GGCACTTTCC TTAGGTTTGG TTTCATCTAC      60

```

```

AGCTTCTATG TTCTCTTCAG CTGGGCTGCT CTCCCCAGTC TCCGTTGGAG GCTGGGCTGT 120
TGCCTTGGCA GCAGCATCCT CTGCGGCAGG GGTGGTGGCA GCAGCAGCAG TGACAGCAGC 180
AGGCACATCG GCTTGTTTAG GCTCCTCCTT GGCTGGGGCA TCTTCAGCCT TGGAGGACGG 240
CGAGTTATCA GTGGAAGCTT TAGTGGCACT TTCTGTCTCA GCTGAGCCGG CCTTCTCCTC 300
TGAGGATGCA GGAGCCTGGG GGGCTACCTG CTCTGTGGCA GCATCACCCCT CCCCCTTTTT 360
CTCCTCGGAA GGAGTTTCTC CTGCTTTGCC GGGCTCATCA GGCTTGGAGC CAGTGGCTGG 420
GGCTGCTTCG GCAGTAGTGG TGCTTCTCC CTTCTTCTCC ACCCCATCGC TCGAG 475

```

## (2) INFORMATION FOR SEQ ID NO:530:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 525 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:530:

```

GTGCTGGCGG ACATGGACGT GGTGAATCAG CTGGTGGCTG GGGGTCAGTT CCGGGTGGTC 60
AAGGAGCCCC TCGGCTTTGT GAAGGTGCTG CAATGGGTCT TCGCCATCTT CGCCTTTGCC 120
ACATGCGGCA GCTACAGTGG GGAGCTCCAG CTGAGCGTGG ATTGTGCCAA CAAGACCGAG 180
AGTGACCTCA GCATCGAGGT CGAGTTCGAG TACCCCTTCA GGCTGCACCA AGTGTACTTT 240
GATGCACCCA CCTGCCGAGG GGGCACCAAC AAGGTCTTCT TAGTTGGGGA CTACTCCTCG 300
TCAGCCGAAT TCTTTGTCAC CGTGGCCGTG TTTGCCTTCC TCTACTCCAT GGGGGCTCTG 360
GCCACCTACA TCTTCCTGCA GAACAAGTAC CGAGAGAATA ACAAAGGGCC CATGCTGGAC 420
TTTCTGGCCA CGGCTGTGTT CGCCTTCATG TGGCTAGTTA GTCATCGGC ATGGGCCAAG 480
GGGCTGTCAG ATGTGAAGAT GGCCACAGAC CCAGATGAAC TCGAG 525

```

## (2) INFORMATION FOR SEQ ID NO:531:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:531:

```

GCAAACAGAC AAGGCTTACA GGTTAGTTCA GGATCTGCGC CTTATCAAGC AAATTGTTTT 60
GCCTATCCAA CCTGCGGTGC CAAACCCATA TACTCTCCTA TCCTCAATAC CTCCCTCCAC 120
AACCCCTCCA TAACCCATTA TTCGGTTCTG GATCTCAAAC ATGCTTTCTT TGCTATTCTT 180
TTGCATCCTT CATCCCAGCC TCTCTTTGCT TTCACTTGGG CTGGCCCTGA CACCCATCAG 240
CCTCAGCAAC TTACTTGGGC TGTACTGCCA CAAGCCTTCA CGGACAGCCC CCATTACTTC 300
AGTAGCCCTC GAG 313

```

## (2) INFORMATION FOR SEQ ID NO:532:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:532:

```

GAGACTATCG CCTATACTTT ATTTGGGTAA ATGGTTTGGT TAAGGTTGTT TGGTGGTAGC      60
TGGTTGGGTT GCTGGGGCTC GGTTGTTGTA GTCGCGATGT TCTTCTCCGA GGCCAGAGCC      120
AGGTCGCGGA CGTGGGAAGC CAGTCCCTCG GAACACAGGA AGTGGGTGGA AGTATTTAAA      180
GCATGTGATG AAGATCACAA AGGATATCTC AGCAGAGAGG ACTTTAAAAC TGCTGTTGTA      240
ATGCTGTTTG GGTACAAGCC CTCCAAGATA GAAGTGGATT CTGTGATGTC TTCAATAAAT      300
CCAAATACTT CTGGTATATT ACTCGAG                                     327

```

## (2) INFORMATION FOR SEQ ID NO:533:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:533:

```

GCCTGCCCCC ACCTTACAGG TCTGGGATGT ACCTTTCCAT CTGTTGCTGC TTTCTTCTAT      60
GGGCCCCCTGC CCTCACTCTC AAGAACCTCA ACTACTCCGT GCCGGAGGAG CAAGGGGGCCG      120
GCACGGTGAT CGGGAACATC GGCAGGGATG CTCGACTGCA GCCTGGGCTT CCGCCTGCAG      180
AGCGCGGCGG CGGAGGGCGC AGCAAGTCGG GTAGCTACCG GGTGCTGGAG AACTCCGCAC      240
CGCACCTGCT GGACGTGGAC GCAGACAGCG GGCTCCTCTA CACCAAGCAG CGCATCGACC      300
GCGAGTCCCT GTGCCGCCAC AATGCCAAGT GCCAGCTGTC CCTCGAG                                     347

```

## (2) INFORMATION FOR SEQ ID NO:534:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:534:

```

GGTAGGACCG GCGAGGAATA GGAATCATGG CGGCTGCGCT GTTCGTGCTG CTGGGATTCG      60
CGCTGCTGGG CACCCACGGA GCCTCCGGGG CTGCCGGCAC ATTCTTCACT ACCGTAGAAG      120
ACCTTGGCTC CAAGATACTC CTCACCTGCT CTTGAATGA CAGCGCCACA GAGGTCACAG      180
GGCACCCTG GCTGAAGGGG GGCGTGGTGC TGAAGGAGGA CGCGCTGCCC GGCCAGAAAA      240
CGGAGTTCAA GGTGGACTCC GACGACCACT GGGGAGAGTA CTCCTGCGTC TTCCTCCCCG      300
AGCCCATGGG CACGGCCAAC ATCCAGCTCC ACGGGCCTCC CAGAGTGAAG GCTGTGAAGT      360
CGTCAGAACA CATCNACGAG GGGGAGACGG CCATGCTGGT CTGCAAGTCA GAGTCCGTGC      420
CACCTGTCAC TGA CTGGGCC TGGTACAAGA TCACTGACTC TGAGGACAAG GCCCTCATGA      480
ACGGCTCCGA GAGCAGAGTT CTCGAG                                     506

```

## (2) INFORMATION FOR SEQ ID NO:535:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:535:

```

GAATTCCTCT TCTTTACCCT CGTCCTGCCG GGCACTTTCC TTAGGTTTGG TTTCATCTAC      60
AGCTTCTATG TTCTCTTCAG CTTGGCTGCT CTCCCCAGTC TCCGTTGGAG GCTGGGCTGT      120
TGCCTTGGCA GCAGCATCCT CTGCGGCAGG GGTGGTGGCA GCAGCAGCAG TGACAGCAGC      180
AGGCACATCG GCTTGTTTAG GCTCCTCCTT GGCTGGGGCA TCTTCAGCCT TGGAGGACGG      240
CGAGTTATCA GTGGAAGCTT TAGTGGCACT TTCTGTCTCA GCTGAGCCCG CCTTCTCCTC      300
TGAGGATGCA GGAGCCTGGG GGGCTGCCTG CTCTGTGGCA GCATCACCCCT CCCCTTCTT      360
CTCCTCGGAA GGAGTTTCTC CTGCTTTGCC GGGCTCATCA GGCTTGGAGC CAGTGGCTGG      420
GGCTGCTTCG GCAGTAGTGG TGCCTTCTCC CTCTTCTCC ACCCCATCGC TCGAG          475

```

## (2) INFORMATION FOR SEQ ID NO:536:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 501 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:536:

```

GAATTCGCCT TCATGGCCTA CAAGCTCTAG CCTAGACCTT TAGTGTGCCA TGCAGTCACA      60
GGTCTGAAAA GCAGCATCAT CCAAACCTTA CTTAATCTCT AAAATCTCAG CTGGTGGACA      120
GCTCATGATT AGTTCAGCCC ACTTCCTCCC CCTTAGTTGA GTTTGCAGCA GGACGCAGGA      180
GATAAGCACT TCCAAGCAAG TCTGATTAT ATATCAAACCT CGGTCTCCAT CCCAGGCCAG      240
CTGACCCTCA GAGCCAGCAA TGCTCTGTGC TTCCTCCCTG CGTCACGGCT TGGCAAGAGC      300
TGCCTCTGCT GAGCAGTGTG TGTGATGGAG ACGGAGGCCG CTGAAGGCCG AGTGCTTGCA      360
GGCTTGTGAA CTGCCATCGA ACACAATCCA AACTCTGGAA ATGTTCTGA CCACCTAAGC      420
CCTCAACAAC GTAATGCCTG TATGTGCTNT TTNTCAGTAA ACTCCTTGCT CATGTCNATA      480
AAGTATCCCT GAACACTCGA G                                     501

```

## (2) INFORMATION FOR SEQ ID NO:537:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 297 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:537:

```

GCGGGCACCA TTTCCAGTAT GTACCAACC AAAGCCGTCA TCATTGCAAT GATCATCACT      60
GCGGTGGTAT CCATTTCAGT CACCATCTTC TGCTTTCAGA CCAAGGTGGA CTTACCTCG      120
TGCACAGGCC TCTTCTGTGT CCTGGGAATT GTGCTCCTGG TGA CTGGGAT TGTCACTAGC      180
ATTGTGCTCT ACTTCCAATA CGTTTACTGG CTCCACATGC TCTATGCTGC TCTGGGGGCC      240
ATTTGTTTCA CCCTGTTCTT GGCTTACGAC ACACAGCTGG TCCCGGGGAA CCTCGAG      297

```

## (2) INFORMATION FOR SEQ ID NO:538:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:538:

GCTCCACCAG	CTACTGAGAA	AATGGCCTGT	AAAGATCCAG	AAAAACCCAT	GGAGGCCTGT	60
GCCTCAGCAC	ATGTGCAACC	CAAGCCTGCC	CCTGAAGCCA	GTAGCCTAGA	GGAGCCCCAT	120
AGCCCAGAAA	CAGGGGAGAA	GGTAGTAGCA	GGAGAGGTAA	ACCCACCCAA	TGGCCCTGTG	180
GGGGACCCAC	TGAGCCTCTT	GTTTGGGGAT	GTGACATCCC	TGAAAAGCTT	TGATTCATTG	240
ACAGGTTGTG	GTGACATAAT	AGCAGAACAA	CTCGAG			276

## (2) INFORMATION FOR SEQ ID NO:539:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:539:

GAATTCGGCC	TTCATGGCCT	AGCCAGACAA	CTTGACTGA	TCTTTCTTG	CTTTGCCTAC	60
TAATCACACA	CACCCTCTCT	TCTAGCCTGT	GAAGACTTAA	CTGATTTTCT	ACGGATGAAG	120
GTTTCAGTGT	CCCAAGGCC	CATACCGTAT	CTGATTTTAC	TTTATTTTGT	TTTGTTAAGC	180
CTAACAGCTT	CTGAGGAGCC	ACGTAGAGCT	CAAGAAGCAA	AAGCTACTGA	GAGTAGATGC	240
TATGTAAACT	GCACAAGACG	TCTCGAG				267

## (2) INFORMATION FOR SEQ ID NO:540:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:540:

GAATTCGGCC	TTCATGGCCT	ACAAAAAGAT	GCTGGACAAG	GCGTTTGCAG	AGCGGATCAT	60
CCATGACTAC	AAGGATATTT	TCAAACAAGC	AACTGAAGAC	AGGCTCACCA	GTGCCAAGGA	120
ACTGCCCTAT	TTTGAAGGTG	ATTTCTGGCC	CAATGTGTTA	GAAGAGAGCA	TTAAGGAACT	180
AGAACAAGAA	GAAGAGGAGA	GGAAAAAGGA	AGAGAGCACT	GCAGCCAGTG	AAACCACTGA	240
GGGCAGTCAG	GGCGACAGCA	AGAATGCCNA	GAAGAAGAAC	NACNAGAAAA	CCAACAAGAA	300
CAAAAGCAGC	ATCAGCCGCG	CCAACAAGAA	GAAGCCCAGC	ATGCCCAACG	TGTCCAATGA	360
CCTGTCCCAG	AAACTCGAG					379

## (2) INFORMATION FOR SEQ ID NO:541:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:541:

```

GAATTCGGCC TTCATGGCCT ACATAATTTG AATCAACACA ACCACCCACA GCCTAATTAT      60
TAGCATCATC CCTCTACTAT TTTTAAACCA AATCAACAAC AACCTATTTA GCTGCTCCCC      120
AACCTTTTCC TCCGACCCCC TAACAACCCC CCTCCTAATA CTAACACCT GACTCCTACC      180
CCTCACAATC ATGGCAAGCC AACGCCACTT ATCCAGTGAA CCACTATCAC GAAAAAACT      240
CTACCTCTCT ATACTAATCT CCNNACAAAT CTCCTTAATT ATAACATTCA CAGCCACAGA      300
TCTCGAG                                         307

```

## (2) INFORMATION FOR SEQ ID NO:542:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 353 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:542:

```

GGATGGCGCC GCGGAGGGTC AGGTCGTTTC TGC GCGGGCT CCCGGCGCTG CTACTGCTGC      60
TGCTCTTCCT CGGGCCCTGG CCCGCTGCGA GCCACGGCGG CAAGTACTCG CGGGAGAAGA      120
ACCAGCCCAA GCCGTCCCCG AAACGCGAGT CCGGAGAGGA GTTCCGCATG GAGAAGTTGA      180
ACCACTGTG GGAGAAGGCC CAGCGACTGC ATCTTCCTCC CGTGAGGCTG GCCGAGCTCC      240
ACGCTGATCT GAAGATACAG GAGAGGGACG AACTCGCCTG GAAGAACTA AAGCTTGACG      300
GCTTGACGA AGATGGGGAG AAGGAAGCGA GACTCATACG CAACACACTC GAG              353

```

## (2) INFORMATION FOR SEQ ID NO:543:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 310 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:543:

```

GGATACCTTA AAAAAACAAT CTATGTCAGA GGCTTCACTG GAGGTTACGT CACGTTATCG      60
TATTAATTTA GAAGATGAGA CACAGGATTT AAAGAAGAAA TTAGGTCAA TCAGAAATCA      120
ATTGCAAGAA GCACAGGATC GACATACAGA AGCTGTCAGA TGTGCTGAGA AGATGCAAGA      180
TCACAAGCAA AAGCTTGAAA AAGATAATGC CAAGTTAAAA GTTACAGTCA AAAAGCAAAT      240
GGACAAAATT GAGGAGCTTC AGAAAAACCT GTTAAATGCA AATTTGTCTG AAGATGAAAA      300
GGAAGTCTGAG                                         310

```

## (2) INFORMATION FOR SEQ ID NO:544:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 282 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:544:

```

GTTTGGATGA TTGGTGGCGT GTACGCAGCT GCTATGGCCT GGGCCATCAT CCCCCACTAT      60
GGGTGGAGTT TTCAGATGGG TTCTGCCTAC CAGTTCCACA GCTGGAGGGT CTTCTGCTCT      120

```

GTCTGCGCCT TTCCTTCTGT GTTTGCCATT GGGGCTCTGA CCACGCAGCC TGAGAGCCCC 180  
 CGTTTCTTCC TAGAGAATGG AAAGCATGAT GAGGCCTGGA TGGTGCTGAA GCAGGTCCAT 240  
 GATACCAACA TGCGAGCCAA AGGACATCCT GAGCGACTCG AG 282

## (2) INFORMATION FOR SEQ ID NO:545:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:545:

GAATTCGGCC TTCATGGCCT AGAACTTTGT ACACCATGGA ATGTTCTACT TATTATTTTG 60  
 TGCTACAATA TGTGCTGTTT CTTTTGTTTG AATTGCAGAT TGTCTACTAT GAAGCAGGGA 120  
 TTATTCTATG CTGTGTCCTG GGGCTGCTGT TTATTATTCT GATGCCTCTG GTGGGGTATT 180  
 TCTTTTGTAT GTGTCGTTGC TGTAACAAAT GTGGTGGAGA AATGCACCAG CGACAGAAGG 240  
 AAAATGGGCC CTTCTGAGG AAATGCTTTG CAATCTCCCT GTTGGTGATT TGTATAATAA 300  
 TAAGCATTGG CATCTTCTAT GGTTTTGTGG CAAATCACCA GGTAAGAACC CGGATCCTCG 360  
 AG 362

## (2) INFORMATION FOR SEQ ID NO:546:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:546:

TCGAGGGACA TGAGGCTGAG CTGGTTCCAG GTCCTGACAG TACTGTCCAT CTGCCTGAGC 60  
 GCCGTGGCCA CGGCCACGGG GGCCGAGGGC AAAAGGAAGC TGCAGATCGG GGTCAAGAAG 120  
 CGGGTGGACC ACTGTCCCAT CAAATCGCGC AAAGGGGATG TCCTGCACAT GCACTACACG 180  
 GGGAGCTGG AAGATGGGAC AGAGTTTGTAC AGCAGCCTGC CCCAGAACCA GCCCTTTGTC 240  
 TTCTCCCTTG GCACAGGCCA GGTCATCAAG GGCTGGGACC AGGGGCTGCT GGGGATGTGT 300  
 GAGGGGGACC TCGAG 315

## (2) INFORMATION FOR SEQ ID NO:547:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:547:

GAATTTTAAT TAAGAATTCG GCCTTCATGG CCTAATCGAG GAGAATGGAG ACCAAACCTG 60  
 TGATAACCTG TCTCAAACC CTCCTCATCA TCTACTCCTT CGTCTTCTGG ATCACTGGGG 120  
 TGATCCTGCT GGCTGTTGGA GTCTGGGGCA AACTTACTCT GGGCACCTAT ATCTCCCTTA 180  
 TTGCCGAGAA CTCCACAAAT GCTCCCTATG TGCTCATCGG AACTGGCACC ACTATTGTTG 240

TCTTTGGCCT	GTTTGGATGC	TTTGCTACAT	GTCGTGGTAG	CCCATGGATG	CTGAAACTGT	300
ATGCCATGTT	TCTGTCCCTG	GTGTTCTTGG	CTGAGCTCGT	AGCTGGCATT	TCAGGGTTTG	360
TGTTTCGTCA	TGAGATCAAG	GACACCTTCC	TGAGGACTTA	CACGGACGCT	ATGCAGACTT	420
ACAATGGCAA	TGATGAGAGA	ATGCTCGAG				449

## (2) INFORMATION FOR SEQ ID NO:548:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 374 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:548:

GGGCTTTAAA	GGCAGACATT	GATGCTACAT	TATATGAACA	AGTCATCCTG	GAAAAAGAAA	60
TGGGAACCTTA	TTTGGGCACC	TTTGATGATT	ACTTGGAGTT	ATTCTGCAG	TTTGTTATG	120
TGAGCCTTTT	CTCCTGTGTT	TACCCATTAG	CAGCTGCCTT	TGCTGTGTTA	AATAACTTCA	180
CTGAAGTAAA	TTCAGATGCC	TTAAAAATGT	GCAGGGTCTT	CAAACGTCCA	TTCTCAGAAC	240
CTTCAGCCAA	TATTGGTGTG	TGGCAGTTGG	CTTTTGAAAC	GATGAGTGTT	ATATCTGTGG	300
TCACTAACTG	TGCGCTGATT	GGAATGTCAC	CACAAGTGAA	TGCAGTCTTT	CCAGAATCAA	360
AGGCAGACCT	CGAG					374

## (2) INFORMATION FOR SEQ ID NO:549:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 294 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:549:

GTACAATCTG	AATCCAGGTC	TGACAGCTGG	CCATACAAAG	TCATACTTTC	CCCATATCCC	60
TCCTCTTTGA	TAGGCATTGT	CATCTAGAGC	AATAGCCTCG	AAATAGACTG	AACACCGTGG	120
CCCATAGCTT	AATCCGTTT	CACCTCTATT	TCAAAGTAAA	CTTGGGCTGG	GATTACAGGC	180
ATGAGTATGT	TTTCATTTGT	ACATAAAGAC	TTTATACAAA	TGCTCTTCCT	AATATTTGCT	240
ACTTATTTTT	GCATTAGTTC	AAATTCTTTG	TCCTGTCTATC	CCAAAACCTCT	CGAG	294

## (2) INFORMATION FOR SEQ ID NO:550:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 303 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:550:

GAATTCGGCC	TTCATGGCCT	ACACTGCACG	GGGAACCCCC	GAACCATCAT	CGTGCCACCC	60
CTGAAAACCC	AGGCCAGCGA	AGTATTGGTG	GAGTGTGATA	GCCTGGTGCC	AGTCAACACC	120
AGTCACCACT	CGTCCTCCTA	CAAGTCCAAG	TCCTCCAGCA	ACGTGACCTC	CACCAGCGGT	180
CACCTTTCAG	GGAGCTCATC	TGGAGCCATC	ACCTACCGGC	AGCAGCGGCC	GGGCCCCCAC	240



TTCCAGCAGC AGCAGCCACT CAATCTCAGC CAGGCTCAGC AGCACATCAC CACGGCCGTC 300  
GAG 303

(2) INFORMATION FOR SEQ ID NO:551:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:551:

GCCACAAGCC TGTCAGCAAG TGGGGCTACT TGGGTCTCG GGCCTCAATC CACTCCTGGC 60  
CAGAGACAAC TTCCTCTCCC ATGGGAAAGG CTAACGCATG CCCATAAATT AAGACATTG 120  
CTCTCCCTCC AAGCCCTGGA AACCTGGGAC TCTCTAACAT CTACCTCTGT TTTCTTTGGC 180  
TGCATTCAAC TTTCTGCAA TTAGTCAGGC CCTGGGGCAG CAGTTAGACG ACAGATGAGT 240  
CAGAGGATTG CAGAATCTAA TCCAGAAGGA AGAGTTTATC CAAATGTTGG TGGCCTTTCT 300  
CTTTTGGCGC ATTCTCTTCT GGTCTGTCT TTTCTCAGGA GTCCTCTGAG CTTCCATGTA 360  
CCGGGCCCCC TCAG 375

(2) INFORMATION FOR SEQ ID NO:552:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:552:

GCAAGGGCAG GCGGGTCCCC CAGTCCCGCC ATTACGGGTT GTCAGACCGT CTGCGTGTGG 60  
CAGGGCTCCC AAGGGCAGGC GGGTCCCCCA GTCCCGCCAT TACGGGTTGT CAGACCGTCT 120  
GCGTGTGGCA TTTTGTGGCT TATAAGCTTC ACCCACTCAC CCCCACCCA CACCCACAT 180  
CCCCCTGCCG GCAGCCCTC AACCTAAGAA GGCCAGAGCA TATTTATTTT CGGAGGGAGC 240  
AGATTACTTC TCCCAGAGAA AGGAAAATCT TGGAAAAGAT TAAAAACAC AAATCTAAGC 300  
CTTGACGGTT TTTTCTTCCC TTTGACCCC CTTCCCATTT TTTCAAGATT TATTTCCATG 360  
GCTTTTTTTT TTCTTGTGCG TGTTCTCGAG 390

(2) INFORMATION FOR SEQ ID NO:553:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 620 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:553:

GAATTCGGCC AAAGAGGCCT AAGCAGGCGC GAGGCGGCGG CAGCGAGCCG GGTCCCACCA 60  
TGGCCGCGAA TTATTCCAGT ACCAGTACCC GGAGAGAACA TGTCAAAGTT AAAACCAGCT 120  
CCCAGCCAGG CTTCCTGGAA CGGCTGAGCG AGACCTCGGG TGGGATGTTT GTGGGGCTCA 180  
TGGCCTTCCT GCTCTCCTTC TACCTAATTT TCACCAATGA GGGCCGCGCA TTGAAGACGG 240

CAACCTCATT	GGCTGAGGGG	CTCTCGCTTG	TGGTGTCTCC	CGACAGCATC	CACAGTGTGG	300
CTCCGGAGAA	TGAAGGAAGC	TGGTGCACAT	CATTGGCGCC	TTACGGACAT	CCAAGCTTTT	360
GTCTGATCCA	AACTATGGGG	TCCATCTTCC	GGCTGTGAAA	CTGCGGAGGC	ACGTGGAGAT	420
GTACCAATGG	GTAGAAACTG	AGGAGTCCAG	GGAGTACACC	GAGGATGGGC	AGGTGAAGAA	480
GGAGACGAGG	TATTCCTACA	ACACTGAATG	GAGGTCAGAA	ATCATCAACA	GCAAAAACCTT	540
CGACCGAGAG	ATTGGACACA	AAAACCCCAG	TGCCATGGCA	GTGGAGTCAT	TCATGGCAAC	600
AGCCCCCTTT	GTCCTCGAG					620

## (2) INFORMATION FOR SEQ ID NO:554:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 600 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:554:

GAATTCGGCC	AAAGAGGCCT	AGGACTTGTT	TCGGAAGGAG	CTGACTGGCC	AATCACAATT	60
GCGAAGATGA	AGGCTCTGTG	GGCCGTGCTG	TTGGTACAT	TGCTGACAGG	ATGCCTAGCC	120
GAGGGAGAGC	CGGAGGTGAC	AGATCAGCTC	GAGTGGCAAA	GCAACCAACC	CTGGGAGCAG	180
GCCCTGAACC	GCTTCTGGGA	TTACCTGCGC	TGGGTGCAGA	CGCTGTCTGA	CCAGGTCCAG	240
GAAGAGCTGC	AGAGCTCCCA	AGTCACACAA	GAAGTACGG	CACTGATGGA	GGACACTATG	300
ACGGAAGTAA	AGGCTTACAA	AAAGGAGCTG	GAGGAACAGC	TGGGTCCAGT	GGCGGAGGAG	360
ACACGGGCCA	GGCTGGGCAA	AGAGGTGCAG	GCGGCACAGG	CCCGACTCGG	AGCCGACATG	420
GAGGATCTAC	GCAACCGACT	CGGGCAGTAC	CGCAACGAGG	TGCACACCAT	GCTGGGCCAG	480
AGCACAGAGG	AGATACGGGC	GCGGCTCTCC	ACACACCTGC	GCAAGATGCG	CAAGCGCTTG	540
ATGCGGGATG	CCGAGGATCT	GCAGAAGCGC	CTAGCTGTGT	ACAAGGCAGG	GGCAGTCGAG	600

## (2) INFORMATION FOR SEQ ID NO:555:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:555:

GAATTCGGCC	TTCATGGCCT	AGTATTCCT	TATCACAGAT	TTTGGGAGCA	ACAGTGTTTT	60
CCCCTCTGGA	GGAGGCTGAG	TTAATTCTGT	GGAACACCCA	TTTGTTGGA	AATAAAAACA	120
CAGCATGGAT	TTAATTCATG	CCACTTATTT	ATTTTATTA	GGACTTGAGC	TTCTTTGTAT	180
TTTTTTTGCT	TTGCTTCCAC	TCAAAACCAG	ATTTGGTGGT	TGCTGTGTAA	ACAGTGAAAT	240
ACAACACAGG	CCAGGACTCG	AG				262

## (2) INFORMATION FOR SEQ ID NO:556:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:556:

```

GAATTCGGCC AAGAGGCCTA GTATTCTTTC GTTCTCTCT AAAAGAAGAA AAATATAATT      60
TAGAAATACA TTGCGTATTT TCTAAAACAA TAAATTTATA GTGTTAATAT TCATAGGGTC      120
AATCAAAATG AAGCTTCTCC TTTGGGCCTG CATTGTATGT GTTGCTTTTG CAAGGAAGAG      180
ACGGTTCCCC TTCATTGGTG AGGATGACAA TGACGATGGT CACCCACTTC ATCCATCTCT      240
GAATATTCTT TATGGCATA GGAATTTACC ACCTCCTCTT TATTATCGCC CAGTGAATAC      300
AGTCCCCAGT TACCCTGGGA ATACTTACAC TGACACAGGG TTACCTTCGT ATCCCTGGAT      360
TCTAATTCTT CCTGGATTCC CCTATGTCTA TCACATCCGT GGTTTTCCCT TAGCTACTCA      420
GTTGAATGTT CCTCCTCTCC CTCCTAGGGG TTTCCCGTTT GTCCCTCGAG      470

```

## (2) INFORMATION FOR SEQ ID NO:557:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:557:

```

GAATTCGGCC AAAGAGGCCT ATGCAGATTC TGTGGTTATA CTCACTCCTC ATCCCAAAGA      60
ATGAAATTTA CCACTCTCCT CTTCTTGGCA GCTGTAGCAG GGGCCCTGGT CTATGCTGAA      120
GATGCCTCCT CTGACTCGAC GGGTGCTGAT CCTGCCCAGG AAGCTGGGAC CTCTAAGCCT      180
AATGAAGAGA TCTCAGGTCC AGCAGAACCA GCTTCACCCC CAGAGACAAC CACAACAGCC      240
CAGGAGAGTT CGGCGGCAGC AGTTCAGGGG ACAGCCAAGG TCACGTCAAG CAGGCAGGAA      300
CTAAACCCCC TGAAATCCAT AGTGGAGAAA AGTATCTTAC TAACAGAACA AGCCCTTGCA      360
AAAGCAGGAA AAGGAATGCA CGGAGGCGTG CCAGGTGGAA AACAATTCAT CGAAAATGGA      420
AGTTCCTCG AG                                     432

```

## (2) INFORMATION FOR SEQ ID NO:558:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:558:

```

GAATTCGGCC AAAGAGGCCT AAAAAGTATA TACATTTTAG TACTGCTTTG ATTTTGTTTA      60
CATACTGAAA AATGTATCTG AAAATGAGTT ATTTTGGACT CGAG                          104

```

## (2) INFORMATION FOR SEQ ID NO:559:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:559:

```

GAATTCGGCC AAAGAGGCCT ATTCACTTCA GCTTCACTGA CTTCTGGATT CTCCTCTTGA      60

```

GTAAAAGGAC TCAGCCAACT ATGAAGTTTT TTGTTTTTGC TTTAATCTTG GCTCTCATGC	120
TTTCCATGAC TGGAGCTGAT TCACATGCAA AGAGACATCA TGGGTATAAA AGAAAATTCC	180
ATGAAAAGCA ACATGATCTC GAG	203

## (2) INFORMATION FOR SEQ ID NO:560:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:560:

GAATTCGGCC ACAGAGGCCT AGCCCAGTCT CGGGTATGTC TTTATCAGCA GCATGAAAAT	60
GGACTAATAC AGTTGCTATG ATTATTAGTT TTTTGCTACT GAGTTGTAGG AGTATCTGAT	120
ATATATTTTG GTAACATAATC CCTTATAAAA TATATGTGTT CCAAATATTT TTTTCCATT	180
CCATAGGCTG CCTTTTCATT CTGTTGTTTC CTTTGCTTCA GGTAAGGGAT TCTGAAACAA	240
CTATTTGGGC AGCAGAACAG CTTCTTTTGT TTGCTTCTC ATTGTCTACT GTGTTCTGCA	300
TAAATAAGGT TATGAATTAG CTGTTGTTCA TATGGGTGAA AGATTGTCAT CTGTGGACGC	360
TTAGATAGCA CATATGGTAA ACCATAGAAC TTCACCATT ATAACCTTTG AACAACTGAT	420
ACACTTAGAA AAGCAGTTTT TGGCTGGGCG CGGTGGCTCA TGCCTGTAAT CCCTAGGCCT	480
CGAG	484

## (2) INFORMATION FOR SEQ ID NO:561:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 176 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:561:

GAATTCGGCC AAAGAGGCCT ATTGAATTCT AGACCTGCCT CGAGCTGACA ACTATGAAGT	60
TTTTTGTTT TGCTTTAATC TTGGCTCTCA TGCTTTCCAT GACTGGAGCT GATTACATG	120
CAAAGAGACA TCATGGGTAT AAAAGAAAAT TCCATGAAAA GCATCAAGGA CTCGAG	176

## (2) INFORMATION FOR SEQ ID NO:562:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:562:

GAATTCGGCC AAAGGGCCTA ATTTTATTAA TAACATTTTA AAAACAACAA TTATGAAAAA	60
GCAATTCGGT TTACCGCTGA TGCTTGCGTC AGCCCTCGCC TTCTCTGCTT GTAGCTCTGA	120
TGATGTGCC GAGAATGCC CAAAGGACAT CGCAGCTCTT ACAGATGGTG GTTACTTGAA	180
GATGTCATC AATCTTCCTT CCCGTGCTGC TAATGGTGGC TTCAGAGCTA CGGAACAAGA	240
CGGTTATGTT AACTTGGAAG ATGGATTGGC AAAAGAGTAC AATGTAAAGG ATGCTATCCT	300

CGTCCTTTTC CAAGGTGATA ATGAAGCAGA TGCCAAGTTC CATTCTGCAT ATGAACTTAC 360  
TACATCAATG CAGAAGGATG GCTCTACGCA AATCACTTCC ACAACGAAAC TTGTTAAGAA 420  
TGTGAATATT GGTGGTCAGG GAAATCCTCT TAAACCTGCT GATGTTAAGC TCGAG 475

(2) INFORMATION FOR SEQ ID NO:563:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:563:

GAATTCGGCC AAAGAGGCCT ACAATTATGG GGCTTATGGG GAACATGCTC ATTGTGTTTT 60  
ACCAATCAGG ACATGGAAC TAAACAATAT TTGTTGACTT ATAGTGAAAC CTGGCTAATT 120  
AGGACTCTTA ACCAGCACTC TTAATTAAC TACTTATTTT TCTCTGTGTC CACCCCTCTT 180  
AAAGAAAAAG AAGCGAACT CGAG 204

(2) INFORMATION FOR SEQ ID NO:564:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:564:

GAATTCGGCC AAAGAGGCCT ATAGGCCTCT TTGGCCGTAG GCCTCTTTGG CCGATTGAAT 60  
TCTAGACGCG GCTCGAGGCA GGTCTAGGCC TCTTTGGCCG AA 102

(2) INFORMATION FOR SEQ ID NO:565:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:565:

GAATTCGGCC AAAGAGGCCT ACTCAATTGT TCCTTTCTTC CATCACCACC CTTTGAAGGT 60  
CTCTTTGCCT ACTTGTAGAT TTAGGGGGAC ATAACATTGA GACTGAGCAG TTTCTTGAAC 120  
CTCTCCTCTC AGCAGCCACC AGCCTGGCTT TCGCAGACCA CTGGAAAGTA TCCCAGCTCA 180  
TTAGCTTTTG GAATGACGGG AAGCCTTTTG ATGTTNGACG TCTTAATCTC AACTCTTCAA 240  
CTTAGCTCAT TCTGGAGCAG TCACGCGATG ACAGATGAGC TCGAG 285

(2) INFORMATION FOR SEQ ID NO:566:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:566:

GATAACTTGA	GATCAAATCA	GTCTATTTTG	ACTCTTCTCT	TTTTCCTCC	TTTTATATCT	60
GATCAGTCAG	CAGTTTTTTG	AAACCCTGTT	CGAAGCAGTT	CTCAACACTT	GTGCACCCAT	120
TCTTTCTCCT	ACACCACTCA	ATCTAGACCC	TCACATGTGG	CTGTCCTGCT	TTCCTTCTCT	180
CCTACTTCTA	AGCTATTCTG	TGGAGAGATG	TCAAAGTAAT	CTTCACAAAA	AATCTGATTG	240
CATCACTTCA	CATCTCGAG					259

(2) INFORMATION FOR SEQ ID NO:567:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 374 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:567:

GGGCTTTAAA	GGCAGACATT	GATGCTACAT	TATATGAACA	AGTCATCCTG	GAAAAAGAAA	60
TGGGAACCTTA	TTTGGGCACC	TTTGATGATT	ACTTGGAGTT	ATTCCTGCAG	TTTGGTTATG	120
TGAGCCTTTT	CTCCTGTGTT	TACCCATTAG	CAGCTGCCTT	TGCTGTGTTA	AATAACTTCA	180
CTGAAGTAAA	TTCAGATGCC	TTAAAAATGT	GCAGGGTCTT	CAAACGTCCA	TTCTCAGAAC	240
CTTCAGCCAA	TATTGGTGTG	TGGCAGTTGG	CTTTTGAAAC	GATGAGTGTT	ATATCTGTGG	300
TCTACTAAGTG	TGCGCTGATT	GGAATGTCAC	CACAAAGTGA	TGCAGTCTTT	CCAGAATCAA	360
AGGCAGACCT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:568:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 250 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:568:

GAATTCGGCC	TTCATGGCCT	AGATAAGTAA	ATAGACTTAC	AGAGGGAAAG	TAACTTGGCT	60
AAGGTGAACT	TGAACCAAGA	TGACTGACTC	CAGAGCTTCC	ATTTTCTTTT	TTCTTTCTTT	120
TTTTTTTTTT	NGGAGACAGA	GTCTCACTCT	GTGCGCCAGG	CTGGAGTGCA	ACGGCGCGGT	180
CTCCACTCAC	TGCAGCCTCC	AGCTCCTGGG	CTCAAGTGAT	CCTCCACCT	CAGCACCCCC	240
ACGTCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:569:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 367 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:569:

```
GAATTCGGCC TTCATGGCCT ACAGGGAGGG AGGGGTTCTG AGAGCCTCAG ACCACAGGGC    60
CTGAGGCCCA CAGTGGCCCA GAGTCCATCT GGCAGCCCCT GCTCTGCTGG CCCAGGGGGC    120
TCTCCCCAGG GTGGAGTAGG CAGGGGAGGG TCGCTGGTCC CCAGTCCCAG CCTTCGAGAG    180
GTGGGGCCAG ACAGCAGGGC ACCCGTACCC GAGACCACAG TGCTCCCCAA GGCCAGCTCT    240
CTCCCCAGTG AGGTCACTCC TACCTCCGGG GCCATTTGGG GCGGGGGATC CTGTAGATCT    300
CTGACTCTGC GCGCCTTAT CTTGATGGCC TGGCNCAAGA AGGGAGGGCG CTGCCCACTT    360
CCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:570:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:570:

```
TTTGTACTGA CTCTTTAAAT TAGTACAATT TTTCTACTTG TCATATAACT CCTGGAACAA    60
TAGTACGGGA AGCCGTGATC CTTTCCCTG ACTCATGATT TTAGTCTTTT TCCAAATCGC    120
TGTTTTTTTT TGGTTTTTTT TTTTGTGCT GCTCCAACGA CCAGCATGTG TTGGAGCAGA    180
TCTCCATGGT AAGCCAAAAG TGGACTTGTC AGCCTATAAC TACTCTGCAG CTGCCACTAA    240
CTCTACAGGC ACAGAGCTCG AG
```

(2) INFORMATION FOR SEQ ID NO:571:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:571:

```
CAGAACTCT TGGACTCAAA AGAGAAAGAA AAAAGTCAAG CCAAGGAAAG CACAAGAGGT    60
AAGACAGGCC TAGTGATCTC AGCAGGCAGA ATTTATGGAC ATATTTTGCA GGCAAGTGGT    120
TCTCAATCAG GGGTGATTTT TGGCTTGTA GACATTAG CAATATCTGG ACACATTTT    180
TGGTTGTCGT AAGTGGATGG GGGTTGCTGC TATCATCCTA CAATGCATAG GTGCATTAGT    240
CTGTTTTTCAT GCTGCTGATA AAGACATACC GGAGACTGGG CAATTGCAA ATGAGAGATG    300
GCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:572:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 578 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:572:

GAATTCGGCC	TTCATGCCTA	CAGCCATATT	AAAACTAAGT	AAACTCGTCC	CTGGGAACTA	60
CACTTTCAGC	TTGACTGTAG	TAGACTCTGA	TGGAGCTACC	AACTCTACTA	CTGCAAACCT	120
GACAGTGAAC	AAAGCTGTGG	ATTACCCCCC	TGTGGCCAAC	GCAGGCCCCA	ACCAAGTGAT	180
CACCCTGCCC	CAAACTCCA	TCACCCTCTT	TGGGAACAG	AGCACTGATG	ATCATGGCAT	240
CACCAGCTAT	GAGTGGTCAC	TCAGCCCAAG	CAGCAAAGGG	AAAGTGGTGG	AGATGCAGGN	300
TGTTAGAACA	CCAACCTTAC	AGCTCTCTGC	GATGCAAGAA	GGAGACTACA	CTTACCAGCT	360
CACAGTGACT	GACACAATAG	GACAGCAGGC	CACTGCTCAA	GTGACTGTTA	TTGTGCAACC	420
TGAAAACAAT	AAGCCTCATC	AGGCAGATGC	AGGCCCAGAT	AAAGAGCTGA	CCCTTCCTGT	480
GGATAGCACA	ACCTGGATG	GCAGCAAGAG	CTCAGATGAT	CAGAAAATTA	TCTCATATCT	540
CTGGGAAAAA	CACAGGGACC	TGATGGGTGC	AGCTCGAG			578

## (2) INFORMATION FOR SEQ ID NO:573:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 623 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:573:

GAATTCGGCC	TTCATGGCCT	AACTTTGTGT	GATCAGAGTT	TATGGGTTGG	GCTGCCCCAG	60
GCTTGGATAA	CTTAAAGGCT	TGATGAGGTC	ATCAATTTAT	GCTTGGCTAC	CCATGGCACA	120
GAAGCATAGC	CCCACTGTGA	TGGCTGGGGT	GGCTCCGGGC	ATCCTGGGCA	GTCAGGAGGA	180
AACTCCATGA	AGGAAGGAGC	TAACCTTTCT	GGGGGTACCC	CTATCCCAGC	ACAGACTTCC	240
TCATCTCATT	GGTCAGAACT	GGGTACATG	AACATGCCTC	AGCCTATCAC	AGGCACAGGG	300
AATGAGACCA	TCATGGACCA	ATCAGGATTC	ACCACTCAAG	GTGGGGCCTG	CCATCCGGAT	360
GGATGCTCTC	CGCCACAGGG	AGGTGGGGGA	CCCAGAAGCT	GTGGGCAATG	GCCATGTGCA	420
CAGTAGGACT	GAGGCACTCA	GTCCCGTAGC	TGACCTACCT	GGGACAGGCC	TGGAGGCTGA	480
CTTAGGTGTG	AGGGGCAGAG	AGATTACTGT	GCACAGACCG	CTGTGTGACC	CCAGATCTAG	540
GTGGGATCCC	GGTGTGCCCC	ATCTGCCTGG	CTTACCCCAA	CCCCTCTGGA	ACCTGAACCA	600
TTGAATTCTA	GACCTGCCTC	GAG				623

## (2) INFORMATION FOR SEQ ID NO:574:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:574:

GAATTCGGCC	TTCATGGCCT	ACTCCAGAAT	GAAGATCTTC	TTGCCAGTGC	TGCTGGCTGC	60
CCTTCTGGGT	GTGGAGCGAG	CCAGCTCGCT	GATGTGCTTC	TCCTGCTTGA	ACCAGAAGAG	120
CAATCTGTAC	TGCCTGAAGC	CGACCATCTG	CTCCGACCAG	GACAACTACT	GCGTGACTGT	180
GTCTGCTAGT	GCCGGCATTG	GGAATCTCGT	GACATTTGGC	CACAGCCTGA	GCAAGACCTG	240
TTCCCCGGCC	TGCCCCATCC	CAGAAGGCCT	GCTCGAG			277

## (2) INFORMATION FOR SEQ ID NO:575:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs



(B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:575:

```
GAATTCGGCC TTCATGGCCT AAGCTTTTGC TTTTAAATA ACTTGATAG CTAAAACTT    60
GACGGTGAAA AGCTCTCAGA TCAAAGCTGA TCCTTCTGTC AGTAATGATT CTAAAAATA    120
GCAAGATTTT AATGGGGAAT ATATTTTATT TCATTCTTAT CTCAAACCTA GGTACTGTGG    180
TCGTTTTGAG TTCATTTCGA GGCATTTTCA ATGTGCCTCA GGCCACATCC AACCTCTCCC    240
CAGAACTCGA G                                     251
```

(2) INFORMATION FOR SEQ ID NO:576:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 261 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:576:

```
GAATTCGGCC TTCATGGCCT ACAGTCTAAG ACATTTCTTA TTCTGCCTTC TTGTCTTCTT    60
CCCTCTCTTC CACATTGGTC AGACTTACAT CTTGGACAGC TCTCCAGCC ATCTTCTACT    120
GCCTCCCTAT TTTTCCCTCC CAGACTTTTC CCCGCAAAC ATCTGTTGCA GGTGGTATTA    180
ATTTCCTATC ACGGCTGTGA CAAATTACCA CAAACTCAGT GGCTTAAAC AATGCACATT    240
TATTATCTGA CAGTTCTCGA G                                     261
```

(2) INFORMATION FOR SEQ ID NO:577:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 216 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:577:

```
GAATTCGGCT TCATGGCCTA GCAAGACTCC ATCTCAAAAA AAGAAAGAAA GAAAAAGAA    60
AGTACAAGTT TATAAAGTAT TATAGTGAAA AATTCGCATT CTGGCTGATT TTAAGCCATT    120
TAAAAATTTT ATAAAAACAAC CTTCCATAAA AATTTGACAG GTGCCAGAT GTTGCTTTCT    180
CCATTATTTT TTTGTTTTTT TTTAATCACA CTCGAG                                     216
```

(2) INFORMATION FOR SEQ ID NO:578:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 294 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:578:

GCGATTGAAT	TCTAGACCTG	CCTCGAGTAA	GTGCCGAAAA	CTTCACTGTG	CTCATCAAGA	60
ACAATATCGA	CTTCCCCGGC	CACAACTACA	CCACGAGAAA	CATCCTGCCA	GGTTTAAACA	120
TCACTTGAC	CTTCCACAAG	ACTCAGAATC	CACAGTGTCC	CATTTTCCGA	CTAGGAGACA	180
TCTTCCGAGA	AACAGGCGAT	AATTTTTCAG	ATGTGGCAAT	TCAGGTTGGT	GGTGCTTTGT	240
ACACTGGGAT	GTGGGGCTGT	GTGTCTAGGG	ATGGAGGATG	TCAAACAAC	CGAG	294

## (2) INFORMATION FOR SEQ ID NO:579:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:579:

GAATTCGGCC	TTCATGGCCT	ACCTTCACAG	AAAAATGCAT	AGCTGGATGC	TGCAGACTCT	60
AGCGTTTGCT	GTAACATCTC	TCGTCCTTTC	GTGTGCAGAA	ACCATCGATT	ATTATGGGGA	120
AATCTGTGAC	AATGCATGTC	CTGTGAGGA	AAAGGACGGC	ATTTTAACTG	TGAGCTGTGA	180
AAACCGGGGG	ATCATCAGTC	TCTCTGAAAT	TAGCCCCCCC	GATCTCGAG		229

## (2) INFORMATION FOR SEQ ID NO:580:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:580:

GAATTCGGCC	TTCATGGCCT	AGCTTACTTT	ACAATTCTGC	TGTTTGTC	GTGTTCTTAT	60
AGTTTTTTTT	AAAGGTATGT	TAATAATTTT	TCCCTTTTGG	TTTATATTTG	TAGGAATCTT	120
TGCCTTTAAG	TGTGCCCGTG	CAGAAGAATT	ATTTAACATG	TTGCAAGAGA	TTATGCAAAA	180
TAATAGTATA	AATGTGGAGC	TCGAG				205

## (2) INFORMATION FOR SEQ ID NO:581:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:581:

GAAGTGTAAT	GTCAGACACA	CAAGAAAAGC	AAATCAGTGT	TGTAAGCTTA	AAGTACAATT	60
TCAAAGGTCA	TTACCAACAG	CAGGGTTTTT	TTTATACTTT	AAAAACATTA	TGCTACATAT	120
CATTGCCATT	TTCATATTTT	GGGGTTTTGC	TACTCTTATA	CAATGGAATC	AATGGAAATG	180
TCATCCAGCC	AGATCTCGAG					200

## (2) INFORMATION FOR SEQ ID NO:582:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:582:

```
GAATTCGGCC TTCATGGCCT ACACAAATGT TTGTTGAGTG CTCATTGTAT GTCTGGAGAC      60
CATTCTGTCT TCTTCCCTAA GAGTGTTCAT GCTGTTGGAC CAGGTGTTAT GATTTTGCTC      120
TGGAGAATAA GGTATTTCCA CATGGAGCAT GTGGAAAATA TAGTGCCTAT CTCCTGAAAG      180
GTCCAGGTGA TGCAAAGATG AATGAGACAT GATTGGAGGT TTTTCTCTG TCTGAAATGC      240
AGACAGTTCT GGGTTGGGCA GCTCTGTAAG ATGCTGAACA TGTGTCCTTC CAAGAAGCAA      300
GGATCAGAAA GCAGACTCTA G
```

## (2) INFORMATION FOR SEQ ID NO:583:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:583:

```
GAATTCGGCC TTCATGGCCT ACACCATTGA CTTCTTCTAC CGGCCGCATA CCATCACCCCT      60
GCTCAGCTTC ACCATCGTCA GCCTCATGTA CTTGCGCTTT ACCAGGGATG ACTCTGTTCC      120
AGAAGACAAC ATCTGGAGAG GCATCCTCTC TGTTATTTTC TTCTTTCTTA TCATCAGTGT      180
GTTAGCTTTC CCCAATGGTC CGTTCAC TCG ACCTCATCCA GCCTTATGGC GAATGGTTTT      240
TGGACTCAGT GTGCTCTACT TCCTGTTTCT GGTATTCCTA CTCTTCCTGA ATTTCGAGCA      300
GGTAAATCT CTAATGTATT GGCTAGATCC AAATCTTCGA TACGGCCACC TCGAG      355
```

## (2) INFORMATION FOR SEQ ID NO:584:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:584:

```
GGAAACTTCT AGAAATAATG ACAAGGATTC AAAC TTATTG TCAAATGAGT CCAATGTCAG      60
ATTTTGGAAC TCAACCCTAT GAACAAATGGG CCATTCAAAT GGAAAAAAAA GCTGCAAAAAG      120
AAGGAAATCG CAAAGAACGT GTTTGTGCAG AACATTTGAG GAAGTACAAT GAGGCCCTAC      180
AAATTAATGA CACAATTCGA ATGATAGATG CGTATACTCA TCTTGAAACT TTCTATAATG      240
AAGAGAAAAG TAAGAAGTTT GCAGTCATAG AAGATGATAG TGATGAGGGT GGTGATGATG      300
AGTATTGTGA TGGTGATGAA GATGAGGATG ATTTAAAGAA ACCTTTGAAA CTGGATGAAA      360
CAGATAGACT CGAG
```

## (2) INFORMATION FOR SEQ ID NO:585:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:585:

GAATTCGGCC	TTCATGGCCT	AGAGAACTG	AGAGGAAGTT	AAAGATTGT	CTTACAAAGG	60
CTGTGTAGTG	ATAAGACCTA	AGGTTTTCTC	TGAGATTCAA	AATGGGTATT	ATTTGTTCTT	120
TAATCCTTCT	GATTATTCTT	TTGAAAAAAA	GGGAAGTAGA	GGAAAGGAAG	TAGAAAAATA	180
ATATTTCTTA	TACTTATTAT	GTACCAGACA	TGGTGCTAAG	TTCATTTAAA	ACACTGCCTC	240
ATTTAATCTT	TGCAACCAAT	TTATACCCAT	ACACATAAGG	CCACAAAAGC	TCGAG	295

## (2) INFORMATION FOR SEQ ID NO:586:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:586:

GAATTCGGCC	TTCATGCCTA	AGGTAAGGGA	AAGTGAGAAG	CAGCAGGATA	GTCAGCCTGA	60
AGAAGTTATG	GATGTGCTAG	AGATGGTTGA	GAATGTCAAA	CATGTAATTG	CTGACCAGGA	120
GGTAATGGAA	ACTAATCGAG	TTGAAAGTGT	AGAACCTTCA	GAAAATGAAG	CTAGCAAAGA	180
ATTGGAACCA	GAAATGGAAT	TTGAAATTGA	GCCAGATAAA	GAATGTAAAT	CCCTTTCTCC	240
TGGGAAAGAG	AATGTCAGTG	CTTTAGACAT	GGAAAAGGAG	TCTGAGGAAA	AAGAAGAAAA	300
AGAATCTGAG	CCCCAACCAC	TCGAG				325

## (2) INFORMATION FOR SEQ ID NO:587:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:587:

GAATTCGGCC	TTCATGGCCT	ACAAGGACGT	TAAAGGCATT	TTATTCCAGC	GTCTTCTAGA	60
GAGCTTAGTG	TATACAGATG	AGGGTGTCG	CTGCTGCTTT	CCTTCGGAAT	CCAGTGCTTC	120
CACAGAGATT	AGCCTGTAGC	TTATATTTGA	CATTCTTCAC	TGTCTGTTGT	ATACCTACCG	180
TAGCTTTTTA	CCGTTCACTT	CCCCTTCCAA	CTATGTCCAG	ATGTGCAGGC	TCCTCCTCTC	240
TGGACTTTCT	CCAAAGGCAC	TGACCCTCG	AG			272

## (2) INFORMATION FOR SEQ ID NO:588:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:588:

GAATTCGGCC TTCATGGCCT AGCATCCCTG AAACGTGTGA ATTTTGAGGA TCCTTCTGGT	60
CTTAAAGCCA ATTTAGAAGG TGCTAATCTG AAAGGTGTGG ATATGGAAGG AAGTCAGATG	120
ACAGGAATTA ACCTGAGAGT GGCTACCTTA AAAAATGCAA AGTTGAAGAA CTGTAACCTC	180
AGAGGAGCAA CTCTGGCAGG AACTGATTGA GAGAATTGTG ATCTGTCTGG GTGTTAGCTC	240
GAG	243

(2) INFORMATION FOR SEQ ID NO:589:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:589:

GAATTCGGCC TTCATGGCCT AAATTATACT CCAAATGTTT TATCTAAAT GCATTTTCTG	60
TCTTTTCCTT TTTACTCTTG TCCTCACTTT TAATGATCCA TCGGCTGACA GTGTCTTTAC	120
ATCCAAAATG CAAAGCAGAC AAATGGGCAT ATCAGGGAAG AACATGACAA AAAGCACCAG	180
CATCAGTGGA GACATGTGCT CACTGGAGAA GAATGATGGC AGCCAGTCTG AACTGTCAGT	240
GGGCACCTTG GGCACCAAGT GCAAAAAGCG GCGCTCTAGC CTTGGTGCCA AAATGGTAGC	300
TATCGTTGGT CTGTCACGGA AAAGTCGCAG TGCTTCTCAG CTCAGCGGAC TCGAG	355

(2) INFORMATION FOR SEQ ID NO:590:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:590:

GAATTCAAAT GCTTCAGGTA AATGTTGAAG CTCGGTGTAC CGCGGGACAA ATCCTGAGTC	60
ACCCCTGGGT GTCAGATGAT GCCTCCAGG AGAATAACAT GCAAGCTGAG GTGACAGGTA	120
AACTAAAACA GCACTTTAAT AATGCGCTCC CCAAACAGAA CAGCACTACC ACCGGGGTCT	180
CCGTCATCAT GAACACGGCT CTAGATAAGG AGGGGCAGAT TTTCTGCAGC AAGCACTGTC	240
AAGACAGCGG CAGGCCTGGG ATGGAGCCCA TCTCTCCAGT TCCTCCCTCA GTGGAGGAGA	300
TCCCTGTGCC TGGGGAAGCA GTCCCGGCC CCACCCCTCC GGAATCTCCC ACCCCGCTCG	360
AG	362

(2) INFORMATION FOR SEQ ID NO:591:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:591:

GAATTCGGCC	TTCATGGCCT	ACTCAGTCTG	CACAACCTTT	TTGCTGTGTG	TCGGAATATG	60
TATAACTGGC	TACTGCAGAA	TCCCAAAAAT	GTCTGTGTTG	TCCACTGCTT	GGATGGACGG	120
GCGGCATCAT	CAATTCTGGT	TGGTGCTATG	TTCATTTTCT	GTAATCTCTA	CTCTACTCCT	180
GGCCCAGCCA	TTCGATTGCT	ATATGCAAAG	CGACCAGGAA	TTGGACTTTC	ACCATCCCAT	240
AGGAGATACC	TGGGCTATAT	GTGTGACCTA	CTGGCAGACA	AGCCCTACCG	CCCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:592:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:592:

GAATTCGGCC	TTCATGGCCT	ACCGTAAGCA	GATGAAGCTG	CTGCTGCTGC	TGCTGCTGCT	60
GAGCTGCGCC	GCGTGGCTCA	CCTACGTGCA	CCTGGGCTG	GTGCGCCAGG	GACGCGCGCT	120
GCGCCAGCGC	CTGGGCTACG	GGCGAGATGG	TGAGAAGCTG	ACCAGTGAGA	CCGACGGCCG	180
GGGGGTCCAC	GCTGCGCCAT	CCACACAGAG	GGCTGAGGAC	TCCAGTGAGA	GCCGTGAAGA	240
GGAGACCAGC	GCAGACATGC	TGCGGCCAGA	TCCCAGGGAT	TACCTCGAG		289

(2) INFORMATION FOR SEQ ID NO:593:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:593:

GAGAGATGGT	GACTGAGGCA	GAAGCTAATA	GGGAAGATGA	TAGGAAAGAA	ATTTTACCCA	60
AGGAATTAGA	TTTAGCAAGA	GAGCGAAGGA	AAGCTGAGAG	GCCAAAAACA	TCTCTGAGGA	120
AAACTGACTC	TGAGAGAGAA	GAGGTGACAA	GGGCAAATGC	ACTCAAGGAT	GAAGATGCTT	180
TTAAAGAAGA	GCAAAAACCT	AAAGCGGAAG	AAGGGGAAAC	AGAGACAGAA	GTAAGAGCTG	240
AGGAAGAGAC	AAAAGCTCCC	CCAAATGAAA	TGGGATCTGA	TGCTGAGAAC	GAAACACTCG	300
AG						302

(2) INFORMATION FOR SEQ ID NO:594:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:594:

```

GAATTCGGCC TTCATGGCCT AGGATATTTA AACCTCTATT ATTTTAGACA AGACTGTCTA    60
GAACTTAAGT TTGATCTGTC AGCCAGTACT CCCATTAAAT TCAGTGTAGT TTCACTTGAT    120
AGAATCAGAT ATGTTATCGA AATGTTAGCA GCAGCTTCAT CCTCCTTCTG ATTAAAGTAA    180
GTAGAAATGG GATGTTTTGT TTAATAACAG CCATAGTGTG TGTTTAGACC ACAGCGGATG    240
TTGTAGACCA GGACCCTCGA G                                     261

```

## (2) INFORMATION FOR SEQ ID NO:595:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:595:

```

GAATTCGGCC TTCATGGCCT AGGGGCTTTT GTCAAGATAG AAGGGTATCA ACGGTTTCTG    60
TACAGCACAG ATTATGACAG CGTCTTCTT AAGACTTATC ATTTGGAGCA CTGGCTCAGG    120
AGTCGAAATC ACCAATGGCT CATCCATCAA TCAACCAGAA GTGAAGACGA AAGCTTCAAA    180
GAAGAGAATG TTAAATTTT ATCAAATGAA ACATATTTTT GAAATACTTG ATAAAATGAG    240
ATGCCTGAGA AAACGTTCTA CAGTGTCTT CTTGGGAGTT CTTGTCTTTT TTCTCCTTTT    300
TATGAAGTGT TACATTGAAG ATAGCTATGT TCTGGAAGGA GACAAACAAC TTATAAGGGA    360
AACTCTCGAG                                     370

```

## (2) INFORMATION FOR SEQ ID NO:596:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:596:

```

GAATTCGGCC TTCATGGCCT ACTAACGACT CATCTTTGTT TTTAGTTTTT TTAATTAACA    60
ATCGTTCTGT TCACAATTTT TAATTTCTT TCTTCCCCCT TCTCCGCAA GCACTCAGGC    120
ATCGGACACG CTATGGTAAA CAACTACAT TGTCTGGTAG ATATCATTCT TATTGTCTCT    180
TTTTTTGGGT TTGCCGTGTG TTGCCCCCCT TTTCTCTCTC AACCCCCCCC ATTCCTCGAG    240

```

## (2) INFORMATION FOR SEQ ID NO:597:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:597:

```

GAATTCGGCT TCATGGCCTA GTGTATTGGT TGTGTGTGTT TTCCTTTTTG CATAAGAAAT    60
ATGTCCATTT AGTCCAGAGG CTCTTGCTTT ATCCGGATGA CGGAGGGTAC ACGGGGCGTC    120
CGCCTCAGTT CCCGCCGAAG GACGTATTCG CTGAACTGGG ACGAGTCTAC TCCTCCCCCA    180
CAGGAGCCCA CGATTTCAAA TCCTCTTTGC TGCAACCTCT CGAG                                     224

```

## (2) INFORMATION FOR SEQ ID NO:598:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:598:

```

GAATTCGGCC TTCATGGCCT AGATATTTTA AAGGAGTGAT GACATCTTTT TCCTATCATG      60
TGAAGAGGGG AAAGAGAAAG GAAAGGGCCC ATATTATTGT GTTCCTGCTT GTGCCAGCTG      120
TTCTATATCT GTTGATCTCA TTAGTCCTC ATGACAGTTC TATGAGGAGG GCACTGTCTAT      180
CATCACCATT GCACAGATGC AGAAACTGTG GCTCACAGAG GATAAAGCTA GGTCACCTCAC      240
ACAACCCCTT GACTCCAGAG CCACCACTCG AG                                     272

```

## (2) INFORMATION FOR SEQ ID NO:599:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:599:

```

GAATTCGGCC TTCATGGCCT AGTAAGGGAG AAACTGAATG GTGATTGAGA GCATAGAGAT      60
TATGTTTTTT TATGCACAGG GCTTCATCAG AAAAATGGAA GGAATTGTCA ATAACAATAA      120
AATGTTTCAGC TAGATCAACT CAGTATATAG TATGTATTAT ACAATTATTC AAAATAGTGT      180
TTAACAGTAC TGTAAATAACA TGAATAAATG TTTGTGCATA TTAAGTGAAA AAGAGCTATA      240
TAAAATTATC TAAGTTTATG GTATATGTAG ATTGTTGCAA AAATGTCTTC AATTCTTTAT      300
CCCTCCCTGT ATCCACACCT GTATCAGTTT TCTCGGGGCA GTCGCCTCGA G                                     351

```

## (2) INFORMATION FOR SEQ ID NO:600:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 107 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:600:

```

GAATTCGGCC TTCATGGCCT AGAATATTTT TATCATCCCA AAGCTAAAC ATTAATAAAT      60
TTAAAGTTTA TTCTTAGAGA TTGATGCAAC TTGCATATCT AATCGAG                                     107

```

## (2) INFORMATION FOR SEQ ID NO:601:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:601:

```

GGAAAATTAC TTAAACGTTG CACACAACGT TTCACAAAAT CTTTGTGAA AGAAGAAAAG      60
GAAATTCAGT GTGTGAGTCT CAGCAGGAGT TAAGCTAATG CAGCTTAACA TCATGCCGAC      120
AAAGAAGCGC TTATCTGCGG GCAGAGTGCC CCTGATTCTC TTCCTGTGCC AGATGATTAG      180
TGCACTGGAA GTACCTCTTG ATCTGGTACA GCCTCCAACC ATCACCCTGC TAAATCCCCT      240
AGAAGTCCCA CTCCTAAACA CATCCGTATT ACTCGAG                                277

```

(2) INFORMATION FOR SEQ ID NO:602:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:602:

```

GAATTCAAAT TAACATTTTA CCTTGAAATA GTTGGCTTCA GATTAATATC AACTTAGTTT      60
CAATAGCATA GGAAATTTGC TTTACTATAT TTCCATTTTC TCCCCGTCCT TTGTGCTATT      120
ATTACTATAC CAATTAGATC TCTACACAAT ATAGGCATAT CAACACATTT TGTAAATTATT      180
TCCTTATCCA GTTGTCTTTT AATATAGATC TGTGAAGAAA AGTATTACAC AAATAGATCT      240
ATTCTGTTTT TTATAATTAT TTAATTACCT TTGGTGGTGC TGTTTATTTT TCATGCATTT      300
GAGTTACTGT CTAGTATTCA TTCATTTCTC TCTGAATCAC TCCCCGGTAT TGCTCGAG      358

```

(2) INFORMATION FOR SEQ ID NO:603:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:603:

```

GAATTCGGCC TTCATGGCCT AGCCATCTTA TTTGAACTAT ATTTTTCCTT CAAAGAAGCA      60
ATAGGTCTCA ACATAGTGTA GGTAGCATCA GGTGACAGAA AGCCAATTTT ATTTTCAAAT      120
TTAAGTTAAT TATCTTCGTG ATCCTATTTA TCCACAATTT CTTTCAGAAA AGACTGAAAA      180
AACACATTAT ATTCAGGAGA TATAATGAAA TTATTGGAAG GCATCACTCG AG              232

```

(2) INFORMATION FOR SEQ ID NO:604:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:604:

```

GAATTCGCCC TTCATGGCCT AAATATTTTC CATCTTCCTC TCCAGTAAAC ATTCTTTTGT      60
CATCACAGTC TGTCTCTGAC ACCTTCGTGA AAGAGGTCTT AAAATGGAAA TATGAAATGT      120
TTTTGAACTT TGGTCAGTGT GGGCCCCCTG CAAGTCTTTG TCAGTCCATC TCAAGACCTG      180
TGCCTGTGAG ATTTCACAAAT TATGGAGATT ATTTTAATGT TTTTTCCTT TTGATGGTAT      240
TGAATACTTT TGAACAGTG GCACAAGCGG CTCGAG                                276

```

## (2) INFORMATION FOR SEQ ID NO:605:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 450 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:605:

```

GAATTCGGCC AAAGAGGCCT AAAAATATAA TTTAAAAATA CATTGCGTAT TTTCTAAAC      60
AATAAATTTA TAGTGTTAAT ATTCATAGGG TCAATCAAAA TGAAGCTTCT CCTTTGGGCC      120
TGCATTGTAT GTGTTGCTTT TGCAAGGAAG AGACGGTTCC CCTTCATTGG TGAGGATGAC      180
AATGACGATG GTCACCCACT TCATCCATCT CTGAATATTC CTTATGGCAT ACGGAATTTA      240
CCACCTCCTC TTTATTATCG CCCAGTGAAT ACAGTCCCCA GTTACCCTGG GAATACTTAC      300
ACTGACACAG GGTACCTTC GTATCCCTGG ATTCTAACTT CTCCTGGATT CCCCTATGTC      360
TATCACATCC GTGGTTTCC CTTAGCTACT CAGTTGAATG TTCCTCCTCT CCCTCCTAGG      420
GGTTTCCCGT TTGTCCCTCC TAATCTCGAG                                450

```

## (2) INFORMATION FOR SEQ ID NO:606:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 614 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:606:

```

GAATTCGGCC AAAGAGGCCT ATCAGGTGAT TTAATAATAA TTTAAACTA CTATAGAAAC      60
TGCAGAGCAA AGGAAGTGGC TTAATGATCC TGAAGGGATT TCTTCTGATG GTAGCTTTTG      120
TATTATCAAG TAAGATTCTA TTTTCAGTTG TGTGTAAGCA AGTTTTTTTT TAGTGTAAGGA      180
GAAATACTTT TCCATTGTTT AACTGCAAAA CAAGATGTTA AGGTATGCTT CAAAAATTTT      240
GTAAATTGTT TATTTTAAAC TTATCTGTTT GTAAATTGTA ACTGATTAAG AATTGTGATA      300
GTTTCAGCTG AATGTCTCTT AGAGGGTGGG CTTTTGTTGA TGAGGGAGGG GAAACTTTTT      360
TTTTTTCTAT AGACTTTTTT CAGATAACAT CTTCTGAGTC ATAACCAGCC TGGCAGTATG      420
ATGGCCTAGA TGCAGAGAAA ACAGCTCCTT GGTGAATTGA TAAGTAAAGG CAGAAAAGAT      480
TATATGTCAT ACCTCCATTG GGGAAATAAGC ATAACCCTGA GATTCTTACT ACTGATGAGA      540
ACATTATCTG CATATGCCAA AAAAATTTTA AGCAAATGAA AGCTACCAAT TTAAAGTTAC      600
GGAATCACCT CGAG                                614

```

## (2) INFORMATION FOR SEQ ID NO:607:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 293 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:607:

GCGAAGACCA	TCAAATGAAT	TGTCACAATA	CTCGAATAAT	GCAAGACACA	GAAAAGGATG	60
ATAACAATAA	TGACGAATAT	GACAATTACG	ATGAAGTGGT	GGCCAAGTCA	TTGTTAAACC	120
TCGGCAAAAT	CGCTGAGGAT	GCAGCCTACC	GGGCCAGGAC	TGAGTCAGAA	ATGAACAGCA	180
ATACCTCCAA	TAGTCTGGAA	GACGATAGTG	ACAAAAACGA	AAACCTGGGT	CGGAAAAGTG	240
AGTTGAGTTT	AGACTTAGAC	AGTGATGTTG	TTAGAGAAAC	AGTGGGGCTC	GAG	293

## (2) INFORMATION FOR SEQ ID NO:608:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:608:

GAATTCGGCC	TTCATGCTTA	CTCAGAAAGC	CACTGCCCCA	AACAAGCCAC	CTGCATTATC	60
AAACACAGAG	AAGAGGAATC	ATTCCGCCTT	TTGGGGACCA	GAGAGTCAAA	TCATTCTCTG	120
GATGCCAGAT	AGTAGTTCCT	CAGGGAAGAA	CAGAAAAGAG	GAAAGTTATA	TATTTGAGTC	180
AAAGGGTGAT	GGAGGAGGAG	GGGAACACCC	AGCCCCAGAA	ACAGGTGCAG	TGCTACCCCT	240
GGCGCTGGGT	TTGGCTATCA	CTGCTCTGCT	GCTTCTCATG	GTTGCATGCC	GACTACGACT	300
GGTGATCCTC	GAG					313

## (2) INFORMATION FOR SEQ ID NO:609:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:609:

GCCCATTCCG	GCCCCATCT	CACCCAAGAT	CCCCCAGAGT	CCAGGAGCTG	GACGGGGACA	60
CCCTCAGCCC	TCATAACAGA	TTCCAAGGAG	AGGGCACCCT	CTTGTCCTTA	TCTTTGCCCC	120
TTGTGTCTGT	CTCACACACA	TCTGCTCCTC	AGCACGTCGG	TGTGGGGAGG	GGATTGCTCC	180
TTAAACCCCA	GGTGGCTGAC	CCTCCCCACC	CAGTCCAGGA	CATTTTAGGA	AAAAAAAAAAT	240
GAAATGTGGG	GGGCTTCTCA	TCTCCCCAAG	ATCCTCTTCC	GTTTCAGCCAG	ATGTTTCTCTG	300
TATAAATGTT	TGGATCTGCC	TGTTTATTTT	GGTGGGTGGT	CTTTCCTCCC	TCCCCTACCA	360
CCCGTCCTCG	AG					372

## (2) INFORMATION FOR SEQ ID NO:610:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:610:

GGAGCTAAAT TTAAGAAATG CAACTAGCCA GGTGCTAAGA AGCTCAGTTA CACGTTTCTC 60  
 AAAAGTTGGC TGTTAGTTCC ATGACTCAGA GTGCACTCAA ATCATTTTAA TTACTCGAG 119

(2) INFORMATION FOR SEQ ID NO:611:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:611:

GAATTCGGCC TTCATGGCCT AGGTCCTGTT TGCCTATTG AGCTGCTATT AGTGTGAGAA 60  
 GAAACTCAGA TGATAGTAGC AGAAACAGAA AGAGGAAGAG GCTACAAGAG ATGGTAGATG 120  
 CTGAACTTAA GGCATTTGAT AACCAATGGA TATAGAAAGA AAAGGAAATG AAAGGACAAA 180  
 AATGGCTCTA AGTTTTTCAA CTTGACTGAT GAGGAAAATA TTCACATCAA GAATGGACTG 240  
 AAGAAATAAG GAGGAGATGC TGGGTTAGGG TGAAAGGAGA TGAGCCCCAT TTTACATTGG 300  
 AAAGCTCTAT GGAACAACGG AAGTAGTAGT AGCTTTATAT TCCAGTATGC CAAATTCTCA 360  
 GCTCCAAGAC TCCAGCACTG TGTGCTCTAC AGTATGTTTT GTGATGTGCC TGAGTTTTGG 420  
 TTTCTTTATT TCAATTAGGG ACTCTTCATA CCAGGGTCAG GGGTTATGCT CGAG 474

(2) INFORMATION FOR SEQ ID NO:612:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:612:

GAATTCGGCC TTCATGGCCT AGTTCCTGTG CTCTTGAAAG AACAAAGTTGA TGCTTGTAAG 60  
 GCTGTTTTGA TTATTTTGTAG GCGCATGATA ATGGAGCTTA CAATGAATAA AAAGACATGG 120  
 GAACAGATGT TGCAAATACT ACTCAGGATA ACAGAAGCTG TCATGCAGAA GCCAAAGGAT 180  
 AAACAAATAA AGGACTTGTT TGCCAGAGC TTGGCAGGGT TACTATTTAG GACGCTCATG 240  
 GTAGCTTGGA TCCGAGCAAA CCTCTGTGTG TACATTTCTC GAG 283

(2) INFORMATION FOR SEQ ID NO:613:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:613:

GAATTCGGCA CGAGGGGCCG CCGTTTTTTT TTTTTTTTTT TTTTCAGGTG CACATAAAGT 60  
 TAGTTTATTA ATGACTATAT TTTGAAGCCA GCCATTTTGT CCAATATTTA AATAACAAGC 120  
 TGTTTAATAT TAAAGCAGAA AGTACTGCCA CATTGTGACA GAAGTACAGC TTTATCCATA 180  
 AACCCTTCAC ACAATTATAC ATTAAATGCT ATTTTTATTT AAGCAAGGCA CCCCTACTTG 240  
 TTCTAAAATA TGGGATGTAC TACACCATGT ATTACTCGAG 280

## (2) INFORMATION FOR SEQ ID NO:614:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:614:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAACCA AGAATTCGGC ACGAGGGAAT      60
GAAATTAGCT AACAGCCTTC AGCTACAGAA ACTTTGGGAT CCAGACAGCA TTTGAGCTGA      120
CGCCACGCC TTCTCAGGCA GCCCCACAG TGAAGGAGGA GGATCTAGAA GGGCCTGGCC      180
ATTTTTCCTC AATGTAGGT CCCTCTGATG GGAATCTTT GTCTGGAGAC CCGAGCTGAG      240
ACTTTGTCTC ATTGGCATCT CTGTCCCTGC TCAATGCTGC TTTCCATGCT CCCTTTTCTA      300
TCACAGACAT CATAGCCTGA AATCTTTCCA CACCCAATAC TGCTTCCTAT ACCCCTTAGC      360
CTTTCCTGAT CTCATTGAGG TTACCATTT TCCTCCGTCG CTCGAG                      406

```

## (2) INFORMATION FOR SEQ ID NO:615:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:615:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGCTTT      60
TTTAGGTAAT TCTTTGTACT CCTGCTGTCT ACCTCTCCTC ACACCCCAGC ACCCCCCATT      120
TTTTCAAACC TTGGTATCTG TTGGGTGAAC AGTATAATCT TTTCATCTGC TTTTAGAATG      180
TGGGATATTT CCAGTACCTA CTTTTTTTTT TTTTTTTTGC TGAATCCAAA GATATATAAA      240
TAAAAATATAT ATATTTTATA AAGATCAGAA TGATATAAAG GAGATACATG TTTCTTCCTT      300
TAAAAAATAA ACGGAAGTTA CATTGTTAAT GTTCATATTA TGATGCGAAT TCTCTGGTTC      360
CTCCTCGAG                                     369

```

## (2) INFORMATION FOR SEQ ID NO:616:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:616:

```

GAATTCGGCC TTCATGGCCT AGGATGTCTG AGGTCTTAAC CTGCCAGTC CTGAATTCCT      60
GGGACTTCAA CGACTCTCTC TCTGCCAAAT GATGTGAGTC TTTAGGTAGA GTTATAGCGC      120
AAAGGGCTAC TATCAATGTT ATTAAGCATA AATTATGACT AGAGCCACAG AATGATTTCC      180
TCATTAATCC AAAAAAAAAA AAAAAGCAAA CCACTCTTTT ACTTTATGAT GAGCACATAA      240
ACAGTTTTTT TTTCTTTTTA TTTATCTACT TTTACTTACT TAAATTTTAG AGATGGGGTC      300
TTGCTATGTT GCCCAGACTA GACTCAAACCT CCTGGGCTCA AGTGATCCTC TAGCCTCAGC      360
CTCCCAAGTA GCTGGGACTA CAGGAAGGAG CTACTGCACC TGACTCAATT TTTTTTTTTT      420

```

CTGAGATGGA GTCTCACTCT GTGACCCAGG CTTGTCTCGA G

461

(2) INFORMATION FOR SEQ ID NO:617:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:617:

GAATTCGGCC	TTCATGGCCT	ACATCAATAA	CAGCCAAACT	GAGACACATA	ATGTTTTCTA	60
CGTCCAAGAG	GCTAAATGTG	AGAATCCAGA	ATTTGAGAGA	AATGTGGAGA	ATACATCTTG	120
TTTCATGGTC	CCTGGTGTTC	TTCTGATAC	TTTGAACACA	GTCAGAATAA	GAGTCAAAAC	180
AAATAAGTTA	TGCTATGAGG	ATGACAACT	CTGGAGTAAT	TGGAGCCAAG	AAATGAGTAT	240
AGGTAAGAAG	CGCAATTCCA	CACTCTACAT	AACCATGTTA	CTCATTGTTC	CAGTCATCGT	300
CGCAGGTGCA	ATCATAGTAC	TCCTGCTTTA	CCTAAAAAGG	CTCAAGATTA	TTATATTTCC	360
TCCAATTCCCT	GATCCTGGCA	AGAATCTCGA	G			391

(2) INFORMATION FOR SEQ ID NO:618:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:618:

GAATTCGGCC	TTCATGGCCT	ACGTGAAGAC	AAGATGAAGT	TCACAATTGT	CTTGCTGGA	60
CTTCTTGAG	TCTTTCTAGC	TCCTGCCCTA	GCTAACTATA	ATATCAACGT	CAATGATGAC	120
AACAACAATG	CTGGAAGTGG	GCAGCAGTCA	GTGAGTGTCA	ACAATGAACA	CAATGTGGCC	180
AATGTTGACA	ATAACAACGG	ATGGGACTCC	TGGAATTCCA	TCTGGGATTA	TGGAAATGGC	240
TTTGCTGCAA	CCAGACTCTT	TCAAAAGAAG	ACATGCATTG	TGCACAAAT	GAGCAAGGAA	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:619:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:619:

GAATTCAAGG	CCACGCCGGA	GCTGTACCTT	GGAAGGAGGA	GCCAAAAATT	ATGCTGAGAG	60
TGATCACAGT	GAAGACGAGG	ACAATGACAA	CAATAGCCCC	ACCGCAGAGG	AGTCCACGAA	120
GAAGAATAAG	AAGAAACCAC	CGAAAAAATA	GTCTCGTTAT	GAAANGACAG	ATACCGGTGA	180
GATAACATCC	TACATCACTG	AAGATGATGT	GGTCTACAGA	CCAGGAGACT	GTGTGTATAT	240
CGAGAGTCGG	AGGCCAAACA	CACCGTATTT	CATCTGTAGC	ATTCAAGACT	TCAAACCTGGT	300
AAGCGTTTTT	AATGTGCTGT	TCACTCTGCT	CTGTATTCTC	TCTTTTTC	GTTCCATTGG	360

CGCTCTCGAG

370

## (2) INFORMATION FOR SEQ ID NO:620:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 183 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:620:

GAATTCGGCC	TTCATGGCCT	AAAAACCTTA	CAACTAAAGC	AAATAGACTT	TTCAAGAATT	60
TAAATAGGAT	TCCTTCCCTT	TAAATCAATTA	ATTATCCACT	TTGTCATGGT	GTCAACCTGT	120
AATTTTCATGG	TTTGTGTGT	GTGTGTGTGT	GTGACAGAAA	TTTACAAACA	ATGTGATCTC	180
GAG						183

## (2) INFORMATION FOR SEQ ID NO:621:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:621:

GAATTCGGCC	TTCATGGCCT	ACAACTAATT	TGATCATATT	AACAAGAGGT	TGGTTTTTAA	60
ACCAAGCAGT	ATAAATATAA	ATACAGCCTT	GGGTAGATCA	TAGTCAAAC	ATCCAAATGC	120
AACCTCAGCT	TCAAAGATTG	TAAAGTCTTT	TCTTTCCCTT	TTTCTCCTTT	CCTTTTTTTT	180
TCCTCCAAAT	ATTTATTTAC	TACCTACCAT	GTGCCAGGCA	CTGTGATGGG	CTATGAGGAT	240
GCAGTGGGGG	ATAGGACAGA	TGCCATCCCT	GCCCTGAGGA	GACTTGCACT	TTATTGGAAA	300
AGATGGACAT	CGTAAAATAT	ACAATCATAC	AAATAAAAAAT	TACATAAATA	ATTCAGTACT	360
TCAACTTGTTG	GGAGGTACAG	CAGTTTATAA	TAATAACATC	CCTCCCACCT	TCTTGAGAGA	420
GTCATTGGTT	GCCCCACTTC	TCTTCATGAA	TGAGAGGACA	TGATTAAACC	TATCATTTCA	480
GGTAGGAGTT	TACTGTGGGA	TGGATATCAA	TCTTCTATTA	ATATGTTTGT	GCTCATGCTC	540
TCCATTTTGC	AATGGACGTC	TCGAG				565

## (2) INFORMATION FOR SEQ ID NO:622:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:622:

GAATTCGGCC	TTCATGGCCT	AAAATGAAAG	CTATGTCTTA	GAACCAATGA	AAAGTGCAAC	60
CAACAGATAC	AAACTCTTCC	CAGCGAAGAA	GCTGAAAAGC	GTCCGGGGAT	CATGTGGATC	120
ACATCACAAC	ACACCAAACC	TCGCTGCAAA	GAATGTGTTT	CCACCACCCT	CTCAGACATG	180
GGCAAGAAGG	CATAAAAGAG	AGACCCTCAA	GGCAACTAAG	TATGTGGAGC	TGGTGATCGT	240
GGCAGACAAC	CGAGAGTTTC	AGAGGCAAGG	AAAAGATCTG	GAAAAAGTCT	CGAG	294

## (2) INFORMATION FOR SEQ ID NO:623:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:623:

```

GAATTCGGCC TTCATGGCCT AGCTTCTGGT AATGGCGGAC TAGATGATTT AGAGCAACCC      60
ACCCATTGAA AAGAACTACA AAACGTCAGA TCTCTAAAAG GCTACAAAAT TAATACAATT      120
GTGAGGAATT GCTAGGTTAT ACTACAAGAG AACAGAAGCA TCCAGAGAGG TAAGCCTAGG      180
ACTTAAAACT ATATTTTAT TGAAGGTATC TGTGGTTGAG TAATAAGCCT GTGCTAAACT      240
GCGTGGAAGT TATGGCACAT TCAAGGCACT ATAGTAACAG AAGTCAGAGC CCAAGGCCCA      300
TCAAAAGGGG TGGAGTGTTT CCTGACAAAC CATCACCCAT AGTATGCTGG GAACCGCAAA      360
TGTTTATACC TTCAGGGTAA TTGTAATCAA AAAATATACT AGCCCTTACA AAGTCTTGTA      420
GCTTGCTTT GCATCATCTG GGTGGACTAG TGAAGTGTA GTTCTGAACA AATATTATGG      480
AGGCAACTCG AG                                         492

```

## (2) INFORMATION FOR SEQ ID NO:624:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:624:

```

GAATTCGGCC TTCATGGCCT ACTTCCTGA GCTGGGGTTT CCCTGCTTGT CCAGTTGTGA      60
GCTGTCTCG GTGTTACCGA GGCTGTGCCT AGAGAGTGGA GATTTTGTAT GAAAGGTGTG      120
CTCGTCTCT GCGTTCTATC TTCTCTCTCC TCCTTGTTCC TGCAAACCAC AAGATAAAGG      180
TAGTGGTG TGTCGACCCC ATCAGCCTCT CACCACTCC CAGACACACA CAAGTCCTCA      240
AAAGTTTCAG CTCCGTGTGT GAGATGTGCA GGTTTTTTCT AGGGGGTAGG GGGGAGCTAA      300
AATCGAATAT AACTTAAAAT GAAAGTATAC TTTTATAAAT TTTTCTTTT AAAACTTGGT      360
GAAATTATTT CAGATACATA TTTTAGTGTC AAGGCAGATT AGTTATTTAG CCACCAAAAA      420
AAAGTATTGT GTACAAATTG GGGCCTCAAA TTTGACTCTG CCTCAAAAAA AAGAAATATA      480
TCCTATGCAT CTCGAG                                         496

```

## (2) INFORMATION FOR SEQ ID NO:625:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:625:

```

GAATTCGGCC TTCATGGCCT ACAAATTTGA TTATGACAAG ATTGTCTACT ATGAAGCAGG      60
GATTATTCTA TGCTGTGTCC TGGGGCTGCT GTTTATTATT CTGATGCCTC TGGTGGGGTA      120
TTTCTTTTGT ATGTGTCGTT GCTGTAACAA ATGTGGTGGA GAAATGCACC AGCGACAGAA      180

```



GGAAAATGGG	CCCTTCCTGA	GGAAATGCTT	TGCAATCTCC	CTGTTGGTGA	TTTGATAAT	240
AATAAGCATT	GGCATCTTCT	ATGGTTTTGT	GGCAAATCAC	CAGGTAAGAA	CCCGGATCAA	300
AAGGAGTCGG	AAACTGGCAG	ATAGCAATTT	CAAGGACTTG	CGAACTCTCT	TGAATGAAAC	360
TCCAGAGCAA	ATCAAATATA	TATTGGCCCA	GTACAACACT	ACCAAGCTCG	AG	412

## (2) INFORMATION FOR SEQ ID NO:626:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 372 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:626:

GAATTCGGCC	TTCATGGCCT	AGTTAGGTGG	CTTTTAGTGT	ATTGACAAAG	TTGTGAACCC	60
ATTATCACAA	TCTAATTTTA	GAACATTTTT	ATCAGCCTCC	TGCCCCCTA	AAAAAACCCA	120
GTACTTTTTA	CCAATCCAGT	CATTTAAAC	TTACTACATA	TTTAATAGAT	GGATAGATAG	180
ACAGGAGGAT	GGACAGACTG	AAGGAAGAAT	GGATGATTAT	GTATAAATAA	ATGAAAAAAC	240
AAAAACTATC	CCCAAATCAT	AAGGGTATAC	GCAATGCTTT	CCTGTGGCAA	AAGATTCCGA	300
ACATGTACAG	CAGATTTTTT	TTCAAATGTT	CATAATTCTA	AATTCCCAA	ATGGTCTACA	360
CAACTTCTCG	AG					372

## (2) INFORMATION FOR SEQ ID NO:627:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 575 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:627:

GAATTCGGCC	TTCATGGCCT	AGGAGAAAGG	AAGGGAAGCA	TTACTGGGTT	ACTATGCACT	60
TGCGACTGAT	TTCTTGGCTT	TTTATCATTT	TGAACTTTAT	GGAATACATC	GGCAGCCAAA	120
ACGCCTCCCG	GGGAAGGCGC	CAGCGAAGAA	TGCATCCTAA	CGTTAGTCAA	GGCTGCCAAG	180
GAGGCTGTGC	AACATGCTCA	GATTACAATG	GATGTTTGTC	ATGTAAGCCC	AGACTATTTT	240
TTGCTCTGGA	AAGAATTGGC	ATGAAGCAGA	TTGGAGTATG	TCTCTCTTCA	TGTCCAAGTG	300
GATATTATGG	AACTCGATAT	CCAGATATAA	ATAAGTGTAC	AAAATGCAAA	GCTGACTGTG	360
ATACCTGTTT	CAACAAAAAT	TTCTGCACAA	AATGTAAAAG	TGGATTTTAC	TTACACCTTG	420
GAAAGTGCCT	TGACAATTGC	CCAGAAGGGT	TGGAAGCCAA	CAACCATACT	ATGGAGTGTG	480
TCAGTATGTG	GCACTGTGAG	GTCAGTGAAT	GGAATCCTTG	GAGTCCATGC	ACGAAGAAGG	540
GAAAAACATG	TGGCTTCAAA	AGAGGGGATC	TCGAG			575

## (2) INFORMATION FOR SEQ ID NO:628:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 457 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:628:

GAATTCGGCC	TTCATGGCCT	AACAGGGTCT	TGCTCTGTCA	CCCGGGATGG	AGTGTAAGTGG	60
CGCAATCACA	GCTCACTGCA	GACTCAGCCT	CCCAGGATCA	AGCAATTCTC	CCACCTCAGC	120
CTCCCAAGTA	GCTGGGACCA	CAGGTGCACA	CCATCATGCC	CAGCTAATTT	TTGTATTTT	180
TTGTAAAGAC	AGGTTTCACT	GTGTTACCCA	GGCTGATCTC	GAACTCCCGT	ACTCAAGCAA	240
CTCCCCACCT	CAGCCTCCCA	AAGTGCTGGG	ATTACAGACG	TGAGCCACAG	CGCCGGGCCC	300
CAAAATCTAT	TTTAAATGTA	AAGAAACCCA	AAAGTAACAG	TTTTGTAAAA	GAAAATTCAC	360
GTACTGTTTT	GTAGTAAATT	CTAAACACTG	TGTATCTTTG	TGTCTAGTTA	AATCCTAGGC	420
TTACAGCTAA	AATTCAATGA	GAAGGCAAGT	ACTCGAG			457

## (2) INFORMATION FOR SEQ ID NO:629:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:629:

GAATTCGGCC	TTCATGGCCT	AGAAAGCTAT	CATTTATTGA	GAGTTAATTG	TATATTAAGT	60
ACCATGCTAA	GTGCTTTGTA	TGTATTATTT	ATCTTTATAA	AAATCCTATG	AAATGAATAC	120
TGTTATTTTC	CCCCATTATA	CAGATGAAGA	TAGAGAAAGG	AAGAAAAGGG	AGGGAAAGAG	180
GAATACCATT	TCACTGAGCA	ATTTTACTGA	AATATTTTAT	GGAGCATTTG	TGGGTTTTGT	240
TTGTTTGCTT	GTTTTGTTTT	TTTGTGTTGTT	TTTTTTTTTG	AGACAGAGTC	TCACTTTGTC	300
GCCCAGGCTG	GATCTCGAG					319

## (2) INFORMATION FOR SEQ ID NO:630:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 557 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:630:

ACGGTGAAAC	CCTGTCTGTA	CTAAAAATAC	AAAAAATTAG	CGGGGCATGG	TGGTGGGCAA	60
CTGTAGTCCC	AGCTACTCGG	GAGGCTGAGG	CAGGAGAATG	GCATGAACCC	AGGAGGCGGA	120
GCTTGCACTG	AGCCGAGATC	ACGTCCTACT	ACTCCAGCCT	GGGCGACAGA	GCGAGACTCC	180
GTCTCAAAAA	AAGAAAAAAC	CAAGACAAAA	CCAAAAATAA	CTTTGTCTGT	TAAGTACAAT	240
ATCTGTGTTT	CTCAGGGACA	GTTTCTATTG	ACCATTGTTT	TTCTTGTCGA	TAGACTATCC	300
TTTCCTTTTT	TTGTACATCT	TGTAATTTTT	GTTTTATTAA	AACTGGAATT	TTAAAAATAA	360
TGCAGTGTGG	CAACTCTACT	GCTTGATTG	GCTCAAAGGT	ATATTATTTA	TTTTTTAATA	420
TAACAAACCA	ATATTTGGGT	TCTCTATTCT	ATAGTTTTAG	CATTTTGAAT	GCAACAACCTG	480
TCTTATTCAC	CATTTAATTC	TCAGTACTAC	CGTTTCTAGT	ACACAATATG	CACTTAATGA	540
ATATGAGGGT	CCTCGAG					557

## (2) INFORMATION FOR SEQ ID NO:631:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

GAATTCGGCC	TTCATGGCCT	AGACCGTGCC	AGGTATTGAG	AGCGACCCTC	ACATTCCTAC	60
AGTGCTCTGT	GTGGCATCTT	AATGAACTT	TATTCTCTCC	CCTTAAATGA	GAAAGAATAG	120
CTAGTTGTCA	TCCTTTCTGA	ACCGATTTTG	TCTTTCAAAG	GTAGTAGTGT	ACCAGGCCTG	180
CTATTTTGCA	AAACGGTCTC	CACCAAAATC	GAATTACCTG	CCTCGCGGGG	CAGGCGTGTT	240
GACCAAGTGG	ACTCTAGAAG	TAGGTGGTTT	GCTTGGTTTC	TTTTCTTTT	AAGGTTTCCC	300
TTTCTTCTTC	TTCTTTTCTG	TGTTTTTTTT	TTTTTTTTTT	TTTTTCAAT	ATAGAAACTG	360
TCCTAAGAG	AGGAAACCTT	TCTGGCCATG	TTATTCACAG	AATCTTTGT	CCCCTAAGTT	420
TGACCTTGTT	CTTTCGTTCA	CCCTTTACTC	TGTCATCTCG	AG		462

(A) LENGTH: 347 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

GAATTCGGCC	TTCATGGCCT	ACATAAAATC	AGTTGACTAT	TGTGCAACAT	AGAATTATTG	60
TTTGTGTGAA	ATTACCGCTG	AAGGACCTTG	CCTACATTCA	AGGGTCTATT	TTTATTTTTC	120
CAGGTATTCT	TTCACATTAG	TGACATTATA	GTCTAGTACA	ACTGCTTGAT	AATTTCGAGA	180
AACTAACATT	AATTTTAGAT	AGTGATTGAT	AAAATTTGGC	CTGCCAAATG	CATTTTAAAA	240
ATAATTCTAG	GATTATCTA	TGCTCATTTT	TAGTATACCT	CATGATATAT	AAGACATCTT	300
TCTTTTGTCA	TCTCAGTTCT	TCAGATACTA	AGACAGAGGT	CCTCGAG		347

(A) LENGTH: 455 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

GAATTCGGCC	TTCATGGCCT	AGGTGGTGCA	ATAATTATAA	ATGTTGCCAG	TCAATGCCAA	60
CCAGTGTCTG	ATTGGCTTCG	TGTGCATGTC	CAATTTCCCTC	TGTGACACTG	TGTTGGTCTGA	120
AGAGCTTCTG	AATCTTCTTC	AATCGCTCTT	TGCATAAATG	TAAAGAGATT	CCCCGCTCGA	180
GTCCCTGGTC	GGTCTCCCCA	TAAATCATCAA	TGTAAGGAGG	AGAATAAAAA	CAGCCTTGG	240
TTTTGCCAGC	TAAAAATAGC	ACCTGACATT	CCCGTACTCT	CAGGAAGATG	CCCACTCCAG	300
AGCCACAGGA	GTAGGTGTGA	GCTGTGCAGG	CTCCTACATC	CTCCCCTTCC	AGTTCAGTCT	360
GGCAGCAGTA	ACTCTGGGAG	CACAGCAGAG	ATCCGCACAC	AAGGCACAGA	GTTGGGGCTC	420
TGCTCTTATC	ACCACCTGAT	TCCGGGCACC	TCGAG			455

(A) LENGTH: 484 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:634:

```

GCATGAAGGC CGGCCTTCAT GGCCTACAGG CTATGTACTG TATGATTCCA AATATGACAT      60
TCTGGAAAAG GCAAAACCAG GGACACAGTG AAAAGATCAG GGGTTGAGAG GGGAAAAAAG      120
GAGGGATGAG TAATCAGAAC ATACAAGATT TTTTAAAGGC AGTGAACCG CTCTGTATAA      180
TACCATAATA GTGGATACGT GTCATTATGC ATTCATCCAA ACTCCTAGAA TGTACAGCAC      240
AAATAGTGAA CTGTAATGTA AATGCAGTGT GTAGGTGTTT ATACAAAAAA ACAGATGGAA      300
AGATTTTGTA CATAGCTCTA TGTGAAAATG TATTTATTTA TTAAGAGCAA AAATATGCTT      360
ATTTCAAATT TCCACGTACG ACTTTTCAA AAAGACACGA TCCACTGAAA TAACCTCCA      420
AAAGAATTTC TATAATCTAT AGCAGGTGTA CATGTTGTTA ATCAAGTGCT TAATGTTACT      480
CGAG                                         484

```

(2) INFORMATION FOR SEQ ID NO:635:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:635:

```

GAATTCGGCC TTCATGGCCT ACCCCACCAG AGGACAGACG TTGAAAGATA CCACGTCCAG      60
TTCTTCAGCA GACTCAACTA TCATGGACAT TCAGGTCCCG ACACGAGCCC CAGATGCAGT      120
CTACACAGAA CTCCAGCCCA CCTCTCCAAC CCCAACCTGG CCTGCTGATG AAACACCACA      180
ACCCAGACC CAGACCCAGC AACTGGAAGG AACGGATGGG CCTCTAGTGA CAGATCCAGA      240
GACACACAAG AGCACCAAAG CAGCTCATCC CACTGATGAC ACCACGACGC TCTCTGAGAG      300
ACCATCCCCA AGCACAGACG TCCAGACAGA CCCCAGACC CTCAAGCCAT CTGGTTTCA      360
TGAGGATGAC CCCTTCTTCT ATGATGAACA CACCCTCCGG AAACGGGGGC TGTTGTGCGC      420
AGCTGTGCTG TTCATCACAG GCATCATCAT CCTCACCAGT GGCAAGTGCA GGCAGCAGTC      480
TCTCGAG                                         487

```

(2) INFORMATION FOR SEQ ID NO:636:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:636:

```

GAATTCGGCC TTCATGGCCT AATTTATTTT AAATTTTAT ATTTATATAT TTTATTTAAA      60
ATTTTCATGA AATGGCCAAG CAGGGTTTAA TATAAAATGG AAACAGGGTT TATCTCAGAA      120
ATTTGGTGGC TAAATTCCTT GTATCCCGTC TTATCTAGGG ATGTTGTTTG TTCAAGGTT      180
CTACCTTGAG AGGAGCCTGT CATTTTCTTT TTTGTGTGCT GCTTTGCCTA GTTGACATCT      240
TGGCTTTATG TGCTCCTGTT GAATGCATTG GGAAATTTTC TTTCTTCTTT CTATGTCCTG      300
AAATAGCTTA TATAAGAGGG AAATCTCGA G                                         331

```

(2) INFORMATION FOR SEQ ID NO:637:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 625 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:637:

```
GAATTCGGCC TTCATGGCCT ACAAAAATAC TTTCATTGT TTTGCTATTA CTAGTTTCTC      60
ATTTTTTATT GCACTTGCAA TCATTTTAGG AATATCCTCA AAATATGCTC CAGATGAAAA      120
TTGCCCAGAT CAAAATCCTC GTCTCAGGAA TTGGGATCCA GGACAAGATT CTGCAAAGCA      180
AGTTGTTATC AAGGAGGGGG ATATGCTCCG TCTGACCTCA GACGCCACCG TGCATTCTAT      240
AGTCATTAGG GATGGAGGAC TGCTTGATTT TGGGGACAAT AAAGATGGAT CCAGAAATAT      300
TACTTTGAGG ACTCATTACA TCCTGATCCA GGATGGTGGG GCGCTTCATA TTGGAGCAGA      360
AAAATGCCGC TATAAATCCA AAGCGACAAT TACCTTGAT GGCAAGTCAG ATGAAGGTGA      420
AAGTATGCCA ACATTTGGCA AAAAGTTTAT TGGTGTGGAA GCTGGCGGGA CACTGGAGTT      480
ACATGGGGCA CGGAAGGCAT CGTGGACGTT GTTGGCAAGG ACCCTGAATT CCTCAGGCTT      540
GCCGTTTGGG TCCTATACCT TTGAAAAGGA CTTTTCCCGG GGCCTCAATG TGAGGGTCAT      600
TGACCAAGAC ACGGACGCTC TCGAG                                     625
```

(2) INFORMATION FOR SEQ ID NO:638:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 506 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:638:

```
GAATTCGGCC TTCATGGCCT AGAGAACTTT TTGAGGGCTT TTTTTTTTCC CCTTTTAAGC      60
TATTTTGTAT GTAGACTTAA TTTTCTAAT TTTGCCACTT CTGGCAATCT GAAATCATT      120
AAAAGGACAC AATTCAAATT TATGTTAAAG GTCATAAATT TTGCCCAGGA CTCAATATTT      180
TCTCATTTTT CCAAAAATAA AATCTTATTT ATGCATTATA GCGACTTGGT TTTCACTTTA      240
TCTTGAATTA TAGCTTTTAA GAGGCAGAAA GAATCCTTTT TATAAGGACA GTCTCAAGTG      300
TACACACAGA TTAAATATTA CAAATATAGG TTGCAAATAA AACTTTCAAA ATGTGGGATT      360
ATAGGAAGCA AAAGAGAACC AACCAAAGCA TCAACAAATT TACCTTTTGT TTTTCTTTAA      420
AGATTTTCT TATTTCTTAA GCTGCTTTTG CATTAGCATT AAATAACATT CTTATTGGAG      480
TGGTATGTGC ATGGCCCAAG CTCGAG                                     506
```

(2) INFORMATION FOR SEQ ID NO:639:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 388 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:639:

```
GAATTCGGCC TTCATGGCCT ACTCCAGCTT TATTATCTCA GCTACCATCA AACTATATTA      60
CATCAAATTA TCATCATTAC TCTCCTGCAC AGTAACTTTC TTTCTGCTCC ACTAAGAAGC      120
TTACTCCCAT CCTGTTTATT CTCTATATCG TAGCTGGACT AATCTTTTCA AAGTGCAAAG      180
CCAATCACAA TACCACCTGC TTAAAATCCA TCAGTGGCTA ACTTTTCATT CTAGGACGAA      240
AAGAAAATTC TATAACATGA CTCAAAGGC TCTGCATGTC CTTCTATTTC TCTTGTCTCT      300
```

TCTAGTCTTT TCTTTGATGG TCTCCACTCC AGCCCTACTG GCTTCTTTCT GGAATCAATG 360  
 TCACCCACAA CCCGTCACGC CACTCGAG 388

## (2) INFORMATION FOR SEQ ID NO:640:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:640:

GAATTCGGCC TTCATGGCCT ACTCCGCTCT GGCCAGAAAG GAGGCCAAGA AGGACGAGCC 60  
 CAAGAGCGGC GAGGAGGCGC TCATCATCCC CCCCAGCGCC GTCGCGGTGG ACTGCAAGGA 120  
 CCCAGATGAT GTGGTACCAG TTGGCCAAAG AAGAGCCTGG TGTGTTGCA TGTGCTTTGG 180  
 ACTAGCATTT ATGCTTGCAG GTGTTATTCT AGGAGGAGCA TACTTGTACA AATATTTTGC 240  
 ACTTCAACCA GATGACGTGT ACTACTGTGG AATAAAGTAC ATCAAAGATG ATGTCATCTT 300  
 AAATGAGCCC TCTGCAGATG CCCCAGCTGC TCTCTACCAG ACAATTGAAG AAAATATTAA 360  
 AATCTTTGAA GAAGAAGAGC TCGAG 385

## (2) INFORMATION FOR SEQ ID NO:641:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:641:

GAATTCGGCC TTCATGGCCT AGCAAGGAGA ACTATTGTCT TATGATCAGC TTTGCCATCT 60  
 TTCTGTCTCT TATCATGTTG GTGGAGGTGG CCGCAGCCAT TGCTGGCTAT GTGTTTAGAG 120  
 ATAAGGTGAT GTCAGAGTTT AATAACAACCT TCCGGCAGCA GATGGAGAAT TACCCGAAAA 180  
 ACAACCACAC TGCTTCGATC CTGGACAGGA TGCAGGCAGA TTTTAAGTGC TGTGGGGCTG 240  
 CTAATAACAC AGATTGGGAG AAAATCCCTT CCATGTCGAA GAACCGAGTC CCCGACTCCT 300  
 GCTGCATTAA TGTTACTGTG GGCTGTGGGA TTAATTCAA CGAGAAGGCG ATCCATAAGG 360  
 AGGGCTGTGT GGAGAAGATT GGGGGGCTCG AG 392

## (2) INFORMATION FOR SEQ ID NO:642:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:642:

GAGTTGAAGT GGCCAAAAAA TTATAACACT CTCCTACTTT CATATCTTGA TTTTAATTTT 60  
 TTCCCTTACT TGTATTTTAT TTCTGAGTGG CTAATGGATC TTAGTCTAAG AACTGGAGGT 120  
 GGAGAACTCG AG 132

## (2) INFORMATION FOR SEQ ID NO:643:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:643:

```
GCACAAAGAC GCATTTTCATC TGAGTTTCCC TGAAAGCTAG AATAAGTTTG CTGGTGTCTAG    60
CTGGGATCCT GTCTTCTATA GCTTTGTATC AAGCAAACCTC AGCATTGTGT CTTGAATGCA    120
TGTCATGTGC AGCCTGCGTT TATGTGCGAC TGAGCACTTG GGTGGGGACA TCTTAAGGCT    180
GTTTATATTT CTTTTTCATG TGTTGTGTGT GTTGTGTGTT TTGTTGTTTT GGAGAGAGTC    240
TCGCCCAAAG CTCGAG                                256
```

## (2) INFORMATION FOR SEQ ID NO:644:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 447 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:644:

```
GTGCTCGCAG CCNTGGTGGC CTGGCGCTCG GCGTNCCTTG TCTGCCTCGC TTTCTCCTTG    60
GCCACCCTGG TCCAGCGAGG ATCTGGGGAC TTTGATGATT TTAACCTGGA GGATGCAGTG    120
AAAGAACTT CCTCAGTAAA GCAGCCATGG GACCACACCA CCACCACCAC AACCAATAGG    180
CCAGGAACCA CCAGAGCTCC GGCAAAACCT CCAGGTAGTG GATTGGACTT GGCTGATGCT    240
TTGGATGATC AAGATGATGG CCGCAGGAAA CCGGGTATAG GAGGAAGAGA GAGATGGAAC    300
CATGTAACCA CCACGACCAA GAGGCCAGTA ACCACCAGAG CTCCAGCAAA TACTTTAGGA    360
AATGATTTTG ACTTGGCTGA TGCCCTGGAT GATCGAAATG ATCGAGATGA TGGCCGCAGG    420
AAACCAATTG CTGGAGGATG GCTCGAG                                447
```

## (2) INFORMATION FOR SEQ ID NO:645:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 285 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:645:

```
GCTCAGCAAC ATTTTAGGAA CAACATTGGT GAGTATATGA GAATAGCCGT GACCTCCATA    60
TTTCATCAGC CGGGTTTTCG TATGTATGTC ATGTGCTACC AGAATTCGAT CTTACAGGCC    120
CTCTTCCACC AGGAGACGCA CCCTGTGAAA AATGTAACT CATTAGATGT CATTGTCTCT    180
TCATTTTCGC TTTTCAGGAT GCTTTCACT TTTTACTCAT TAACCTATTG TGCTTGTCGT    240
AAAGATACTG ACTTCTACTG TGGCGTGTGT ACTGAGAGAC TCGAG                                285
```

## (2) INFORMATION FOR SEQ ID NO:646:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 257 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:646:

```

GGAGATTGA AGAAGAATTG AATGAAAGGA TGATTCAAGC AATTGATGGG ATTAATGCAC      60
AGAAGCAATG GCTCAAGTCT GAAGACATTC AGAGAATCTC ACTGCTTTTC TATAACAAAG      120
TACTAGAAAA AGAGTACCGG GCCACGGCAC TGCCAGCGTT CAAGTATTAT GTGACTTGTG      180
CCTGTCTCAT ATTCTTCTGC ATCTTCATTG TGCAGATTCT CGTGCTGCCA AAAACGTCTG      240
TCCCGGGCTA TCTCGAG                                         257

```

(2) INFORMATION FOR SEQ ID NO:647:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 296 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:647:

```

GGGGCAGCAG TAAATCCAG GCCCGAATGG AACAGCAGCC CACTCGTCCT CCACAGACGT      60
CACAGCCACC ACCACCTCCA CCACCTATGC CATTGAGAGC TCCAACGAAG CCTCCAGTTG      120
GACCCAAAAC TTCTCCCTTG AAAGATAACC CGTCACCTGA ACCTCAGTTG GATGACATCA      180
AAAGAGAGCT GAGGGCTGAA GTTGACATTA TTGAACAAAT GAGCAGCAGC AGTGGGAGCA      240
GCTCTTCAGA CTCTGAGAGC TCTTCGGGAA GTGATGACGA TAGCTCCAGA CTCGAG      296

```

(2) INFORMATION FOR SEQ ID NO:648:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 324 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:648:

```

GTGCANATGT ACGGTGACCA CCTGGCCCTT GACCGGGCGG CTCGAACCTG GCGGCCCTGG      60
GACCAGCGTC TTCTTCCTCA ACAGCCCGTT CCCCAGAATG TCCAGCCACT CTCTGGGGC      120
CGGGGCTGGG GCGGGCTCGG GCTCCATGGC AGCAAGGAAC TCTCGGGCCA GGGCCCCAGG      180
CTGCTCANCC TCCTCCGCGG GGGGTTGTCC CATGTCCTCC AGCGGTGGCA GCTCACTCAG      240
GTCATCCTCT TCCTCCTCTT CCTCCTCCTC TTCCTCCTCA CCCTCTGCAT CCTCAACCCC      300
ATCCAGTACC TCGAAGTCCT CGAG                                         324

```

(2) INFORMATION FOR SEQ ID NO:649:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 309 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double



(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:649:

GAATTCGGCC	TTCATGGCCT	ACTTCCTGAT	ACAGATACAT	TTACTACAGA	AAATTCCTT	60
TATAGGTGTA	AATTTCTGTT	TACAACAGGC	GAGTCGAAAA	ATAATAAGAA	CAAAAGGAAA	120
AAAAGCAGTC	ATACTTTATT	TTAGGCAGTT	GAGGGGTAGC	TGAATAAGTT	ATCCTGTGTT	180
GTTTGTTTCT	GTTACTTATA	GCTCAAAGTC	ATCAATATGC	CAGGGTGGCA	TGTTTGGGGA	240
TGGTGCATTTC	TTGTCTTTTG	CAGTCATTTA	TCAGGGTGGC	GTTTCCTAAA	TTCTAACACA	300
GACCTCGAG						309

(2) INFORMATION FOR SEQ ID NO:650:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:650:

GGTGACGCCT	GCTTCACATC	TCTAATGAAC	ACCCTCATGA	CGTCGCTACC	AGCACTAGTG	60
CAGCAACAGG	GAAGGCTGCT	TCTGGCTGCT	AATGTGGCCA	CCCTGGGGCT	CCTCATGGCC	120
CGGCTCCTTA	GCACCTCTCC	AGCTCTTCAG	GGAACACCAG	CATCCCGAGG	GTTCTTCGCA	180
GCTGCCATCC	TCTTCTATC	ACAGTCCAC	GTGGCGCGGG	CCACCCGGG	CTCAGACCAG	240
GCAGTGCTAG	CCCTGTCCCC	TGAGTATGAG	GGCATCTGGG	CCGACCTGCA	GGAGCTCTGG	300
TTCCTCGAG						309

(2) INFORMATION FOR SEQ ID NO:651:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:651:

GCAAGGGCAG	GCGGGTCCCC	CAGTCCCGCC	ATTACGGGTT	GTCAGACCGT	CTGCGTGTGG	60
CAGGGCTCCC	AAGGGCAGGC	GGGTCCCCCA	GTCCCGCCAT	TACGGGTTGT	CAGACCGTCT	120
GCGTGTGGCA	TTTTTTGGCT	TATAAGCTTC	ACCCACTCAC	CCCCAACCCA	CACCCACAT	180
CCCCCTGCCG	GCAGCCCCTC	AACCTAAGAA	GGCCAGAGCA	TATTTATTTT	CGGAGGGAGC	240
AGATTACTTC	TCCCAGAGAA	AGGAAAATCT	TGGAAAAGAT	TTAAAAACAC	AAATCTAAGC	300
CTTGACGGTT	TTTTTTTCCC	TTTTGACCCC	CTTCCCATCT	CTTCAGAATT	TATTCCCATG	360
GCTTTTTTTT	TTCTTGTGCG	TGTTCTCGAG				390

(2) INFORMATION FOR SEQ ID NO:652:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:652:

GAATTCGGCC	TTCATGGCCT	ACCAAATTCC	CTGCCTGTGC	CTGCTGGGAC	CAGACTCCGC	60
TGTCATGAGG	GTGACATCCG	CCACCTGTGC	TCTTCTGCTG	GCTCTGATCT	GCAGCGTCCA	120
GCTGGGGGAT	GCCTGCCTGG	ATATCGATAA	ACTGCTTGCG	AATGTTGTGT	TTGATGTGTC	180
CCAAGACCTC	CTGAAGGAGG	AGCTTGCTCG	TTACAACCCC	AGTCCCCTGA	CAGAGGAGTC	240
CTTCCTCAAT	GTCCAGCAAT	GCTTTGCCAA	TGTCCTCGAG			280

(2) INFORMATION FOR SEQ ID NO:653:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:653:

GGTGTTTGGC	CACAGTTCGG	GACCTATGGT	AGAAAAATAC	TCAGTAGCTA	CCCAGATTGT	60
AATGGGTGGC	GTTACTGGCT	GGTGTGCAGG	ATTTCTGTTC	CAGAAAGTTG	GAAACTTGC	120
AGCAACTGCA	GTAGGTGGTG	GCTTCTTCT	TCTTCAGATT	GCTAGTCATA	GTGGCTATGT	180
GCAGATTGAC	TGGAAGAGAG	TTGAAAAAGA	TGTAAATAAA	GCAAAAAGAC	AGATTAAGAA	240
ACGAGCTCTC	GAG					253

(2) INFORMATION FOR SEQ ID NO:654:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:654:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCC	TCGGCCTCCC	AAAGTGCTGG	60
GATTACAGGG	GTGAGCCACC	GCACCCAGCC	TGTGAAATAC	TATTTTATG	GTAAGCTAGA	120
ATTTTAAAAC	TATTTCTTGC	AAGTTTAGGA	TTAAATGAAT	TACATTATGT	AAAATTACAT	180
CTTTGTCTGT	ATTACGTATT	TGTATACAGT	TGAATAGTTT	TGGTAACACG	TACCTTAGTG	240
CTTTACATTG	ATTGGCTCAT	TAATTTTATA	TTTTGAGTAA	TAATCATCTA	ATTTTATTAT	300
TGTACAATTC	AGTCTTAAAT	TATGTTATGA	TGTGAAAATG	GTAGCTTTCT	TGAGTGTATT	360
TATTTTGTGA	GTAGTGGGCA	ATGTAATTAT	CACACATAAA	ATGAACTGTG	AGACTTTTGA	420
GCCTGAAATA	TTATTCATAT	TATAATGCTC	CTCGAG			456

(2) INFORMATION FOR SEQ ID NO:655:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:655:

```

GAATTCGGCC TTCATGGCCT AGTATATACA TGCATTTAAT TGTGATTTTA TCACCTTTCC      60
CATTTCTTTC CCCACAAGCT GGCATTTTCAG TAGTTGCTTT TGAATAATGG TTTTGGTTAC      120
CTGGGAAGGC AGGCCAGAA CCCATTTTCCT TGAATTGCAG TTCCGGGCTG TGTTCCACATG      180
ACTGCTGTCT AGCTGATGCA TTTTTCACAT TTGTCAACTC TGGTTAGAAA CAGGTCCTCA      240
GGAGTATTCT CTAACCTGAT ATTTTCTAAA AAGATATGTT GATTCAACTT TGTTTAGCAT      300
CCTACTTTCT AGATTGTGGG GCTCATTTTG CCAGGGCCAA GCTACCAGAA AAGTAGAAGT      360
GGAGATTACC TGGTATGTAT CTCTCTGGGT GCCCCAGTTA GAGCTGCCAC AGCTCAGGAA      420
AAAGATGAGG CATAACGACC TTGAATGTAA TTGGAGTAAG TGACAAAATA AGAACTACCC      480
TGGGAAACTC GAG                                         493

```

## (2) INFORMATION FOR SEQ ID NO:656:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:656:

```

GAATTCGGCC TTCATGGCCT ACTTGGCCTT TGTGTGTGTT TGCCTTTGTC AGTCTCCTGC      60
CTCTGGATGG GTTCTGTGTT GTTCCAAAC TGTCTGGGGC TGTGCACCAT GGAGACAGTG      120
TCCTGGGCTG CCTCTAGCCT GATCTGGTTA GAATAAGCCC CTCTCCTTTG CATGCGTCTC      180
CAACCTGACA TTTGGAGCAT CCAAAACAAA TCATGACATT CCAAGTAAA GATAGAAACC      240
ACCGTCTCCA CTCCACTCGA G                                         261

```

## (2) INFORMATION FOR SEQ ID NO:657:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 621 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:657:

```

GAATTCGGCC TTCATGGCCT AGATGGTCTC TGCTGCTCTT GCCTCTAGTT CATGGAGATG      60
TGTCTCTGTT CAGGCCAAGA TACAGCCAGC CAGGCCTGTC GTCTGGGACC CAGGAGGCCT      120
CTGATGACCA AGGGCTTTCA CATCCTAAGT CATTTGGAAG GAGGCCCTGA GAACAAAGTC      180
ACCTTTGTCA CTCCCAGTGA ACTGAATGAG GAACATGCTG TCTCCTGTCT TGGCCTCCCC      240
TTTCATGAGA TACTGGGGAG AAGAGAACAT TCCTCCTGGC TTAGTTGTAG CAGACCCAGA      300
CCTGTGCCCA GCTTTGGTCC CCCTTCCCAA CTTCTGAAGC ACGTGCTGCA GAGCCACCTT      360
GGTCTGAGCA CCTGAGGACC AGCCCCTCCT CCCTCAGTGC GGGTCATCTC TTGGGGGATT      420
TTCTTAAAGT GAAGAAAGGG GGTGGGAAC CATATTGCCC CTCCCTCCCC CATCAAACCT      480
CCTTCATTTA ACTTGCTATA AAATGAGTCA TATAAAGAAA CTCTATATGG GTGAGGTATA      540
TCCCACCTCT GTGAAAACAT TACAAATCAA ACCGCTTCTC TCAGTTTATT TAAGATGCTT      600
TTGTTGCAAG CGGTACTCGA G                                         621

```

## (2) INFORMATION FOR SEQ ID NO:658:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 567 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:658:

GAAGTCTTGG	AGATTCTAG	TTTATTCATT	AACAGCAGAA	GGATGGAAGA	AAATTCCTCT	60
GGCAATACCA	TGTCAGCCTC	TTCGATGTTT	AATACAGAAG	AAAGAAAATG	TTGCAGACT	120
CACAGAGTCA	CGGTGCATGG	GGTCCCAGGG	CCAGAGCCCT	TTACCGTTTT	CACTATTAAT	180
GGAGGCACCA	AGGCAAAGCA	GCTTCTGCAG	CAAATTCTGA	CAAATGAACA	AGACATCAAA	240
CCTGTTACCA	CAGACTATTT	TTTGATGGAA	GAAAAATATT	TTATATCTAA	AGAAAAGAAT	300
GAATGTAGGA	AACAACCATT	CCAGAGAGCC	ATTGGTCCAG	AAGAGGAGAT	CATGCAAATT	360
TTAAGCAGCT	GGTTTCCAGA	AGAGGGATAC	ATGGGCAGGA	TTGTCTTAAA	AACCCAGCAG	420
GAAAACCTAG	AAGAGAAAAA	CATTGTTCAA	GATGACAAAG	AGGTGATCTT	GAGCTCAGAG	480
GAGGAGAGTT	TCTTTGTCCA	AGTGCATGAT	GTTTCTCCAG	AGCAACCTCG	AACAGTCATC	540
AAAGCACCCC	GCGCCAGCAC	ACTCGAG				567

(2) INFORMATION FOR SEQ ID NO:659:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 388 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:659:

GAATTCGGCC	TTCATGGCCT	AGGCCCTTTG	GCCCTGGGGT	GGGGGTGCTT	ACTACATCCC	60
TGGAAGGTGC	AGGGAGGCTG	ATGGCCTTGA	TCTCTAACAC	AAACAGGAAC	CAGCTTCCTC	120
CCTCCCCCAC	CCTGGGTTC	CAGGGCCTCC	GGGTGTGAGA	TCCTCCCCCA	CTGCAGTGCC	180
CCACCCGCTC	CCCACAGAAG	CCCGGAGAGT	GGCTCTGTCA	CCAGAGGTGT	CATTTCCAG	240
CTGTCTGTGG	GAGGTGAGTG	AGCAGGGAAT	GTGTGTGCTG	GGTGTGGGAA	CTCAGCCCAA	300
TCTAAGAGAA	GATACTCTTG	GCTTCCTCCC	CCTCAGAGGA	GCAGCCGCGT	CCCTGGTCCT	360
TGTGCACTGA	CAGTCCCGGA	GTCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:660:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 491 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:660:

GAATTCGGCC	TTCATGGCCT	AGCCAGGAGT	TGAGGTGGAA	GTCACCATTG	CAGATGCTTA	60
AGTCAACTAT	TTTAATAAAT	TGATGACCAG	TTGTAACTT	CTGTTGGTTT	TTATTCAGAA	120
TACTGGCAGA	TTTAGGAAT	ATAAAGGTGT	ACTATGAGAC	TTCCACTTTT	CAGGTGGAAT	180
ATATGGGTAT	CTTAGAGTGG	TCTATCCTGT	TTTCGTTGTC	GTTTGAGTCA	TTTGAAAAC	240
GGATTCCGTT	AACTACATAA	TATGTGAGAC	CTGACTGGTT	TTATTGGACA	CTGGCAGTTT	300
ATAACTTTGG	CATACTCTAG	ATAAATTCTG	ATTGGTATGG	GGTGTTAAGG	TTTCTGGGGC	360
GTTTGTAATG	CACACCCATG	GTTGAGAACC	TAGTGCCTA	GTAGGCACGT	GTTAAAAAGC	420
TAGTAACTAA	TATTTTAA	TTAACCAAGT	TTAACGTCCT	TAAAAAAGGA	TTAAGTGGA	480
AGGACCTCGA	G					491

## (2) INFORMATION FOR SEQ ID NO:661:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 310 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:661:

```
GAATTCGGCC TTCATGGCCT ACCTCAATAT GCTATCAGAT TCTGAAAATT CCCAGCATCT 60
GGAAGTTCAT GAGCCACCAA AAGCTGTGGA TAAGGCGAAA TCCCCAGGGG TTGATCCTAA 120
GCAGTTGGCA GCAGAACTCC AGAAGGTTTC ACTACAGCAG TCACCGCTGG TTCTGTCATC 180
AGTTGTGAA AAAGGATCTC ATGTTTCATTC AGGTCCTACA TCAGCAGGAT CCAGTTCCGT 240
TCCCAGCCCT GGGCAACCAG GGTCCCCCTC AGTGAGCAAA AAGAAGCACG GCAGCAGCAA 300
GCCACTCGAG
```

## (2) INFORMATION FOR SEQ ID NO:662:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 404 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:662:

```
GAATTCCTAT GGCCTACTTC CGGCGCAAGT GGCTTCTGAT AATCATGGCG CCCCTCGGAA 60
CAACTGTATT GCTGTGGAGC CTCTTGAGGA GTTCTCCGGG CGTGGAAACGG GTCTGTTTCC 120
GGGCTCGAAT CCAGCCCTGG CACGGTGGCC TGCTCCAACC GCTACCTTGC TCTTTCGAGA 180
TGGGGCTGCC ACGCCGCCGG TTCAGCTCCG AGGCCGCAGA ATCTGGTAGC CCAGAGACCA 240
AGAAACCTAC ATTTATGGAT GAGGAAGTTC AAAGCATACT CACGAAAATG ACAGGCTTGA 300
ACTTGCAGAA GACTTTTAAG CCAGCTATAC AAGAACTGAA GCCACCAACC TATAAGCTAA 360
TGACTCAGGC ACAGTTGGAA GAGGCTACAA TACAGGCTCT CGAG 404
```

## (2) INFORMATION FOR SEQ ID NO:663:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 224 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:663:

```
GAATTCGGCC TTCATGCCTA ATTTGTGTGA TGGCCAAAGA GTTCTTATCA GAAGTGGCAA 60
AAACTACATA CAGGTTGGCT TCCAATAACA TGAGCCAGGT ATTTTTCAGT AATATTTTGA 120
AGTGTCTTTT CTTTCTAGAC ATGCACATGA TGGTGCCAA GCCAGAACAG TGGGTAAAGC 180
CAATGGCTGT AGCAGGAGCC AATCAGTACA CCTTTCATCT CGAG 224
```

## (2) INFORMATION FOR SEQ ID NO:664:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 476 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:664:

GAATTCGGCC TTCATGGCCT AGGTCTACCA AAGTGAGGAC ATTACTGCAG ATATTCTTCT	60
CCTTTTCTCC TACATTATCA TTTCTCTTTT ATAACATCAT TTCTGCAGAT ATGTAAAAAT	120
ACATCCCATC TTCAAAAAGA AAAACAAAAA TCTGACTGTA CTTCATATCC CCTTCTAGAC	180
ATTGCCACAT TTCTCTACTT CTGTTTACAA CAAAACTCCT GGAAAGATTT GTCTATACTG	240
GCTTTTCTCTA CTTCTTTTAC TTCCATTCCCT TTCCTAACCA CTCTAAACAT GCTTGGGTCC	300
CCACCACTGT AACAAATATA ATTTGTGTCC AATAACCAGT GATCTCTGTA TCACCGGTTC	360
CAAGGGTGAG ATCTCAGACT TCACCTTTCT GGATTGATTG ACACATTGGA CTCAGTTGGT	420
TACTCCTCAC TTCTTGAAAC TGTCTTCACT GGGCTTTTTC GACTCCATAT CTCGAG	476

(2) INFORMATION FOR SEQ ID NO:665:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 238 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:665:

GAATTCGGCC TTCATGGCCT ACTCTCTACT CCTTTGTGCT CAATTTCCAT TGTGGAATTC	60
TGCATATATG ATCTTGTGGC ACATTTCTAC ATTTCTCTAG CCCAGAAGGC CTTCCCTGTT	120
CACTATCTCC TTCTTTTAC TAACCTTAC TATATTTCCA GGCACAGTTC AGGCATCAGA	180
TAGCCCTATT TGTTCCAAC TTCACCGTAG GTCAGATTAT AAGCCTTGCA ATCTCGAG	238

(2) INFORMATION FOR SEQ ID NO:666:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 361 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:666:

GAATTCGGCC TTCATGGCCT AGACCATTTT CATTGTTTAT AGTTTATTTT TTATAAATAG	60
TGCTTTCTGG AATATCCTTA AATACCTCTA TCTTTTAAAC ATCCTTGTGT ATACATCTTT	120
TCTCACACTT GGCTTCCTCT TGGAATAGAA TCTCCTGGAA ATTAGATAGC TGAGGTAATA	180
GTCCCTGAAC CTTTACAAA TTGCTACACA ATAAATACCA AACTGATTTT CAGGAATGTA	240
GTCCCATCAA CAGTGTGCTT GTTTATCCAT ATCGTTGCTG ATCTGAGTTT TGTCAGTCTA	300
TTGATTCCTA CCAATCTGCC AGTATCATAG ATTTTAAAT ATTTTGTG TGATCTCGA	360
G	361

(2) INFORMATION FOR SEQ ID NO:667:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 343 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:667:

GAATTCGGCC	TTCATGGCCT	ACTCATACAC	AATGAATACA	AAAACCTGGAA	CTCTGCAATT	60
TAATACTGTT	TCCAACTGG	ACACTGGAGA	ATATCCTGT	GAAGCCCGCA	ATTCTGTTGG	120
ATATCGCAGG	TGTCCTGGGA	AACGAATGCA	AGTAGATGAT	CTCAACATAA	GTGGCATCAT	180
AGCAGCCGTA	GTAGTTGTGG	CCTTAGTGAT	TTCCGTTTGT	GGCCTTGGTG	TATGCTATGC	240
TCAGAGGAAA	GGCTACTTTT	CAAAAGAAAC	CTCCTTCCAG	AAGAGTAATT	CTTCATCTAA	300
AGCCACGACA	ATGAGTGAAA	ATGATTTCAA	GCACACCCTC	GAG		343

(2) INFORMATION FOR SEQ ID NO:668:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 266 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:668:

GAATTCGGCC	TTATCCTACA	ACTTTGAATA	GACATAAGAG	TGCCTGTCTG	CATAAACCTT	60
CATCAACATT	GGTATTATCT	TTCTTTTTC	TCTTTGCTAA	TTGGATAAGT	TTTAAAAAGT	120
GTAACACATT	TTAGTTTGCA	TAGCTTTGAT	TATAAGTGAG	GTTTCGACATT	TTTTTTCATT	180
TCTTTACACT	TTAAAAAATC	TAACCGTGGC	AACGTTTGCA	GGTGTGTGTT	CTTCTTATGT	240
TGCTGAGTGT	TATTACTCC	TGGACG				266

(2) INFORMATION FOR SEQ ID NO:669:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 452 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:669:

GAATTCGGCT	TCATGGCCTA	CAAAAAAGAA	ATTAAGAAGC	TCCTAAAGAC	GCAAAGAAAT	60
CATCTACTCC	TCTGTCTGAA	GCAAAAAAAC	CAGCTGCTTT	AAAACCAAAA	GTACCCAAGA	120
AGGAAGAGTC	TGTCAAGAAA	GATTCTGTTG	CTGCCGGAAA	GCCAAAGGAG	AAGGGGAAAA	180
TAAAAGTCAT	TAAGAAGGAA	GGCAAGGCCG	CAGAGGCTGT	CGCTGCAGCT	GTCGGCACTG	240
GAGCCACCAC	AGCAGCTGTC	ATGGCGGCAG	CTGGAATAGC	AGCCATTGGC	CCTGCCAAAG	300
AACTCGAAGC	TGAGAGGTCC	CTTATGTCAT	CTCCTGAGGA	TCTAACCAAG	GACTTTGAAG	360
AGTTAAAGGC	TGAAGAGGTC	GATGTAACAA	AGGACATCAA	GCCTCAGCTG	GAGCTAATCG	420
AAGACGAAGA	GAAACTGAAG	GAAAAACTCG	AG			452

(2) INFORMATION FOR SEQ ID NO:670:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 284 base pairs  
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:670:

GAATAATTGA	CTGAAAGTGT	AGTGTCGAGT	GGTAGAATAA	GTGCTGATCC	TGGGGTCTTA	60
TACCAATGTT	GCTAACTGTG	AGCAGCCTTT	GTCAAATCAC	TTGGCTTCAT	TTTCAGTGGC	120
CTAAGAGTAA	TAGGTTTAAT	TATTTCCATA	ATTCCTTTAA	GTTTTTACAT	TTTCTGAGTT	180
CATCTTTTGT	GTTTTTCCTG	GCATTTTACT	ATTCCTCTTT	CCTGCTTTTG	GCTATTTTCT	240
CAACAGGTCC	ACGACTGGAA	TTTGAAAGCA	AGAAACATCT	CGAG		284

(2) INFORMATION FOR SEQ ID NO:671:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 235 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:671:

GAATTCTGGA	AGCAGCCTAT	CATCGCTCCG	TCTGCCCTCC	ATACACAGCG	TTGTGTGTG	60
TTATGCCAAA	CTGCTTGGTG	TTTTCCAACC	GTGGACCATG	ATATCTCACT	TCCTTAACCT	120
TACCTTCATA	TGCTTTTCCT	TTGTGTCTTC	TTCTGAAATG	CTTCTTCCTT	TTGTCCAGGC	180
TGACTCCTGT	TTGTCTGAGA	CATGTGTCTC	AGGAAGCCTT	TCCGTTCCCC	TCGAG	235

(2) INFORMATION FOR SEQ ID NO:672:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 370 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:672:

GAATTCGGCC	TTCATGGCCT	AGCATTGATG	GCCCATGTAG	AAGACCTGAT	CATTAAGACT	60
ATAATCTCTG	CTGAAGTAGC	TATTGCTACT	GCCTGTAAAA	CCTTTGTTCC	TCATCGCAGC	120
AGTTGTTTTG	AACTCTATGG	CTTTGACGTG	CTCATAGATT	CTACTCTGAA	GCCATGGTTG	180
TTGGAAGTGA	ATCTCTCTCC	TTCTTTGGCC	TGTGATGCGC	CTCTGGACCT	AAAGATTAAA	240
GCCAGTATGA	TTTCAGATAT	GTTCACTGTT	GTAGGATTTG	TGTGCCAAGA	TCCTGCCCAG	300
CGGGCATCAA	CTCGGCCAAT	TTATCCCAAC	TTTGAGTCTT	CCAGGCGAAA	CCCTTTCCAG	360
AAACCTCGAG						370

(2) INFORMATION FOR SEQ ID NO:673:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 295 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:673:

GAATTCGGCC TTCATGGCCT ACACAGACAT CATCATGCAG AAGATGACCA TTTCCAACAT	60
GGAGGCAGAT ATGAATAGAC TCCTCAAGCA ACGGGAGGAA CTCACAAAAA GACGAGAGAA	120
ACTTTCAAAA AGAAGGGAGA AGATAGTCAA GGAGAATGGA GAGGGAGATA AAAATGTGGC	180
TAATATCAAT GAAGAGATGG AGTCACTGAC TGCTAATATC GATTACATCA ATGACAGTAT	240
TTCTGATTGT CAGGCCAACA TAATGCAGAT GGAAGAAGCA AAGGAAGTAC TCGAG	295

## (2) INFORMATION FOR SEQ ID NO:674:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:674:

GAATTCGGCT TCATGGCCTA CTGCTCGA GTGATGGGTA TCGGGATGGG TATCGGGATG	60
GCCCACGCCG GGATATGGAT CGATATGGTG GCCGGGATCG CTATGATGAC CGAGGCAGCA	120
GAGACTATGA TAGAGGCTAT GACTCCAGA CTCGAG	156

## (2) INFORMATION FOR SEQ ID NO:675:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:675:

GAATTCGGCC TTCATGGCCT AATAATTGT AAGTTAAAAT AAGTAATACA AATTAAATGC	60
AAATCAAATG CCTGAAGAAG AAGCACGAAT ACCTATTTTG AAATCTGCTG TAGCCGAGAC	120
AGCTTCTAAA TCTCCCACTT GGTTTCTGTT TCTGGAAGGT GTGGGTCCTG TGCTAGCTGG	180
AGTGTGGTG GCCATCTTGG TGCTGGCGGT CCTCATGCTG ATGTACTACT GCTGCAGACA	240
GAACAACAAA CTTGGCCAAC TCGAG	265

## (2) INFORMATION FOR SEQ ID NO:676:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:676:

GAATTCTGGA TCAAAACAGA GGAAATGGT GGGAATTCTT GTATAGATAC AGTCTAACAT	60
AGAAACCCAT GCCCATCAGC AGTAATTTCC AGTCCCCCAG TCCTCCAAGC CCTGGTACTC	120
GAG	123

## (2) INFORMATION FOR SEQ ID NO:677:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:677:

```
GAATTCAGAG ATAAAGCTAA AGTTCATTG GAGCACCAGC CCAAATCCTG GACTTCTTTC      60
TGCTCCTCCT CAGAGGTTCT CTGGTTATAA GTTTTATGTG TATCTTGCCA GAATTTTTC      120
TATGTTATTA ATACAAATAT ATGTAGCCAC AGAAATTATA GCGTGTCATT CAGCCTTTGG      180
TTTATTGTC ATTGATAGTA TTATGTCCAT ATCACTCTAC AACTTCTTAG GCCATGAAGG      240
CCG                                     243
```

## (2) INFORMATION FOR SEQ ID NO:678:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:678:

```
GCGATTGAAT TCTAGACCTG CCTCGAGACC ACCTATGGAA GCCAAGTGTT CCCGGGCCAT      60
GAGACCTGCC CAATCAAGCA GAAACACATT TGGAGAGACA AACAATCAG ACACGCTCGA      120
G                                     121
```

## (2) INFORMATION FOR SEQ ID NO:679:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:679:

```
GAATTCTAGA CTGCCTCGA GTACCTGATC TTTTACTGTC TCTATAGGTT CATCTTTTTC      60
TTCCCTTTGT TAATTCTACT TTTAGTTT TTTGCTAGAT TTTTCTTGCA ATTGGATAGG      120
CCCATTTAAC CTATTTTGCC TCCACTCTAA ATTCACTACT CCAAGAATTG GTTCACTCT      180
TCCAAATTTT GTATATAAGC CAGAGTTCTG CATAAAGGAA AATACTTAAA TTCTTTCTAA      240
TCTAATGTGG TTTCTGTCAT CTTTCAGGAA ACTTTTCCTC GAG                          283
```

## (2) INFORMATION FOR SEQ ID NO:680:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:680:

GAATTCGGCC	TTCATGGCCT	AGGGTTTGTG	GCTAAAAATT	ATGCTTAAGA	ACACATCTAA	60
CAAACCTAAA	GCTGCAAAGA	CATAATGTTA	ATGTAGGTGA	AAATTTCACT	TGTGTTTATT	120
CTGATAGACA	AAATTGTATT	TTAGATGAGA	AGCAACAATT	TTCATGTTGT	ACTGAGATTG	180
TTAGTAATGA	AATACTTCCA	AATATTAGTG	ATGGTAGAAA	TCTAGTGTAG	GGCTCTTTGC	240
TGAGAAGGGA	AAAAAGTCAC	ATAAGAAATC	TACTTTTCAG	TAAACTGCAA	ATATGTGTGC	300
TTCAACCTAT	AACATATTCT	GTCACTTTGA	GCTTGTGATA	TTGACAGAGA	ATGAAAACCTT	360
GATAAGACTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:681:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:681:

GAATTCGGCC	TTCATGGCCT	AGAGCGACTT	CGACACCATG	CCAGACATTG	AGAGTGATAA	60
AAACATCATC	CGGACCAAGA	TGTTCCCTTA	CCTGTCAGAT	TTGTCCAGGA	AGGACCGGAG	120
AATTGTCAGC	AAAAAATATA	AAATTTATTT	TTGGAACATC	ATCACCATTG	CTGTGTTTTA	180
CGCGCTGCCC	GTGATCCAGC	TGGTCATTAC	CTATCAGACA	GTAAGTGCTA	AACCTAGCCC	240
CAAACCCCTC	GAG					253

(2) INFORMATION FOR SEQ ID NO:682:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:682:

GAATTCGGCC	TTCATGGCCT	AATCGAGGAG	AATGGAGACC	AAACCTGTGA	TAACCTGTCT	60
CAAAACCCCTC	CTCATCATCT	ACTCCTTCGT	CTTCTGGATC	ACTGGGGTGA	TCCTGCTGGC	120
TGTTGGAGTC	TGGGGCAAAC	TTACTCTGGG	CACCTATATC	TCCCTTATTG	CCGAGAACTC	180
CACAAATGCT	CCCTATGTGC	TCATCGGAAC	TGGCACCAC	ATTGTTGTCT	TTGGCCTGTT	240
TGGATGCTTT	GCTACATGTC	GTGGTAGCCC	ATGGATGCTG	AAACTGTATG	CCATGTTTCT	300
GTCCCTGGTG	TTCTTGGCTG	AGCTCGTAGC	TGGCATTTC	GGGTTTGTGT	TTCGTCATGA	360
GATCAAGGAC	ACCTTCCTGA	GGACTTACAC	GGACGCTATG	CAGACTTACA	ATGGCAATGA	420
TGAGAGAATG	CTCGAG					436

(2) INFORMATION FOR SEQ ID NO:683:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:683:

```
GAATTCGGCC TTCATGGCCT AGTCCCCACT TTATCTCTTT AAACGGTTTC TTTTCTTTT    60
TTTTTTTTTA GACCTCTCAG GGATGAAACA TTTTATTTT TAAACTAGTT TTTTTTTAA    120
ATAACATTAA CACATGCTGA ATGCTTAAAT CTTTTTAGAA TTCAGAAAGG TAAAATGAAA    180
GTCACCATTG TCATTCTCAT CATCTTACTC CCAGAGATGA TTGTTATTAA TATTTCCAGA    240
AATTTTGCTT GTATATGCAA ACAGCAATAT ATTGTAGCTG CTCGAG                    286
```

(2) INFORMATION FOR SEQ ID NO:684:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:684:

```
GAATTCGGCC TTCATGGCCT ACCCTTACCA GATACTGAAT CTGCCAGTGC CTTATTTTGG    60
ACTTCTCAGC CTCCTGGGCT GGGTGAGGTG GTTCACTACC AGCCTTGGCA CCATAGTGAG    120
ACTCCCATCT CTACAAAAA AAAAAAAAAA AAACTTTCTG TTGTTGTAA GCTACCCAGT    180
TTATGGTATT TTGTTACAGC AACCCAAACA GTCTGAGACG TTTAGCTTAA CTCCTGTATG    240
CACTAGATAC AGTCTGCACT TTGACATCAA TCTCGA                    276
```

(2) INFORMATION FOR SEQ ID NO:685:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 155 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:685:

```
GAATTCGGCC TTCATGGCCT ACTAAGAATA GGAAAAAAAA TAACACTATG ATACCACAAC    60
CTTATTACAT CAACTGCTT TGGGCTTTAT CCTCTTTAA GTGTGCTCAG GTGTTCAGCC    120
ACGAGGTTTC TGACAGCCCT CATAAGACCT TCGAG                    155
```

(2) INFORMATION FOR SEQ ID NO:686:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:686:

```
GAATTCGGCC TTCATGGCCT ACTTTGAAGA GTACGATTC AAAACCAGCA ATTGGTGTGA    60
ATGCAAAAAC ATTTGTTGGC ACCATTTATT TAAAAA AAAAGCTGTA TGCAGCAGAA    120
```

```

AGCCTTATAC AAGTTGTTTT TCTTTTTTTC CTTTTTCTTT TTTTGGTAC CTTCATTTCT 180
GTTACTTTTA TATAAAATTC TCTGCAAAGG AAGGCCTCTC TTTGGACTAC AATTTGGAGG 240
CAGCCACTTG TTGTGCCTGC TTCTGTAA GAATGTGGAT ATCAAGCCCC CCCGACTCGA 300
G 301

```

## (2) INFORMATION FOR SEQ ID NO:687:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:687:

```

GAATTCGGCC TTCATGGCCT AATTTTTACA GAAATTATTT CCACAATCAG AAGTACTGTA 60
CTGATTGCAT TTCTTGTCT CAAAAAGTTT TCCTTATGTT TCTCAAAGCA GTATTTACAC 120
TAATTATTCA ATTCTTATCT TTCTTTCAGT TTTCTCCAAT AGACTGTGAG ATCTTTGAGG 180
GCCAGGTGA CATGTCTCTG ATACCTACAC CCTATGCAGC TCCTAGTGCA GGACCTTGCA 240
GTGACAAGCT CGAG 254

```

## (2) INFORMATION FOR SEQ ID NO:688:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:688:

```

GAATTCGGCC TTCATGGCCT AATATTTATT TAGATGCTAT TATTACTGTT TGGACTTTTA 60
TTTTGGCAGG CTTTGTTCCT GACTGTAGGG TTTTCCAATG TGACTAATGA CCACTCCTGC 120
CTCTCCCGTG GTGTATTTTG GGCACCCCTCC CACCCGGCTG CATACCCGGC CAGGGCTCCC 180
ACAGAGACAA GGAGGGCACA GGTGTCTGCC CCCTCTTTGA AATCGATATA CACACATCCA 240
CGCACATGCG GCCCACTCGA G 261

```

## (2) INFORMATION FOR SEQ ID NO:689:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 214 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:689:

```

GAATTCTAGA CCTGCCTCGA GCTTCTGGCT GTTGTCTTTG CTGGGCATCC TTTTACAAG 60
TGGAAGAACT AGGATGGCTT TCCAAAGTCT TCTAGAAATG AAGTTCTTTC TCTGTGCAGC 120
TTTCCCCCTT GGAGCAGGAG TGAAGATGTT TCATTATCTT GGGCCTGGGA AACCACTTCC 180
CCAGGCTTCT CCCTCCCCC ACCCCCGACT CGAG 214

```

## (2) INFORMATION FOR SEQ ID NO:690:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:690:

```

GAATTCGGCC TTCATGCCTA CAAACTTAAA AGTAAATCTT TGGAAATCAG ATAGTAGTCT      60
TGAAACTATG GAAAACACAG GAGTGATGGA TAAGTTTCAG GCAGAGTCTG ATGGGGACAT      120
GTCTTCAGAT AATGACTCAT ACCACTCTGA TGAATTCCTT ACAAATTCTA AGTCTGATGA      180
AGACAGGCAG CTAGCTAACT CATTAGAGAG TGTAGGGCCA ATAGATTACG TTCTTCCTAG      240
TTGTGGTATT ATTGCCTCAG CGCCTCGATT GGCAGTCGG TCCCAGTCTC TTAGCAGCAC      300
ACTCGAG                                           307

```

## (2) INFORMATION FOR SEQ ID NO:691:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:691:

```

GAATTCGGCC TTCATGCCT ACTCCATATT TATTTAGATG CTATTATTAC TGTTCGGACT      60
TTTATTTTGG CAGGCTTTTT TCCAGACTCT AGGGTTTTCC AATGTGACTA ATGACCACAC      120
CTGCCTCTCC CGTCGTCTCT TCTGGGCACC CTCCCACCCG GCTGCATACC CGGCCAGGGC      180
TCCCACAGAG ACAAGGAGGG CACAGGTGTC TGCCCCCTCT TTAATTCGA TCTACACACA      240
TCCACGCACA TCGACCCCG AGGAAACGAA ACCCACTCTA GAAAACGCGA CCTTGGCCCG      300
ACCTAAAGCA GCCAGCCGTG AGTGCAGACC CCTTGGCCAG CGTGGCGCAG TGGCCCTGAG      360
CAGTAGTGGC GTGTGTGTAG ATCAAGTCGG ATCTAGTCCA GCTCGGTTCA TTAGCGATCC      420
ATGTAATCTG ACGTCATCTT GTCTCGAAGT CTCTTTTTTT GGCCCAGGCC TTGAAGAATA      480
CACTGGACTC GAG                                           493

```

## (2) INFORMATION FOR SEQ ID NO:692:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:692:

```

GAATTCTAGA CCTGCCCCCTG CCTCCTGCAT CCAGCCCCCA ACATGGTGCC AAAGCTTCCA      60
GAAGCCAAAA AGCTTCTGAT TTTTAAGGTA GTGGGCATCT CTCTCCTAAT GACGAAGCTG      120
CTCAGCAACT CCACCTGCCC GCCGCAGGAA GGAGCAGTCC CCTGCTATCC CTGCAGCCAC      180
TCCCAGCACA CCCGCACACA GCCAGCACCA CCGCCCACTC TCGAG                                           225

```

## (2) INFORMATION FOR SEQ ID NO:693:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:693:

```
GAATTCGGCC TTCATGGCCT ACTGGCTCAT ACAATACATC AATAAGTATG CAACTTTTCA    60
TTTGTTATTT CGTTGCTGGA AGTGGGAAAT ACCCCATCTT CCCAGGAGTG AAATGGTTCT    120
ACTTTCTCTC CGTGGTGCCC TGTATCATTA CTCAGCTCTG CTGCTGCTCT CCGCAGCCCC    180
TAAAAGTAGC ATGGATCGGG GAAGAAGGAA GGACGGCAGG AAGGCAGGCA GAGATCCTCA    240
GGCAGGTCGA G                                         251
```

(2) INFORMATION FOR SEQ ID NO:694:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:694:

```
GAATTCGGCC TTCATGGCCT AGTGTGTGTG TGC GTGTGTG TGTGTTTACA TATAAAGTTT    60
TTTGTTAACA AATAAATTTT GTTAGAGCTA GTCAGATTTT TGTGTTGCTTA ATCTGCTAGT    120
TTTGTTAGGT TATATTTTTC AAGGAATTG TCCATTTTAC CTATGTTGTT GAATTTTGGG    180
TGTAACGTTT TTCATTACTC TTTTCTTTT AATATCTGTG GGATCTGTAA TGATGCCCCC    240
TCTTTCATTC CTGATATGAG TAATTCTTAT TCTCTTTTG TCTATCAGCT CGAG          294
```

(2) INFORMATION FOR SEQ ID NO:695:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:695:

```
GAATTGGCCT TCATGGCCTA ATTGGGACCA AATAGAGGCT CACAGATATT TGGATTATTT    60
TATGTGCTTA TTATTAAATA AGGAAAGCAT TTTGTGATAT GTGGAAGACG CTATGTGAAG    120
TTTTACCTAT CTTCTCAAAG ACCTTTTCTT TTGTATTTTC TTTTGGTGTT TCTTAAAGCC    180
AAACAAAGAA ATGTTCTTAA GGAGACAGGG TGGGTTTTTC TGTGGGCCTA GGCCATGAAG    240
GTCGAG                                         246
```

(2) INFORMATION FOR SEQ ID NO:696:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:696:

```
GAATTCGGCC TTCATGGCCT ACCCTAATAT AAAAAGCATT GTCACCATGT TGATGCTGAT      60
GCTATTGATG ATGTTTGCTG TCCACTGTAC CTGGGTCACA AGCAATGCCT ACTCTAGTCC      120
AAGTGTAGTC CTGGCCTCAT ACAATCATGA TGGCACCAGG AATATCTTAG ATGATTTTAG      180
AGAAGCTTAC TTTTGGCTAA GGCAAAATAC AGATGAACAT GCACGAGTAA TGTCTTGGTG      240
GGATTATGGC TATCAGATAG CTGGAATGGC TAATAGAACT ACGTTGGTGG ATAATAACAC      300
CTGGAATAAC AGCCACATAG CACTGGTGGG AAAAGCTATG TCTCTCGAG      349
```

(2) INFORMATION FOR SEQ ID NO:697:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:697:

```
GAATTAAATA AGTTACTGAC TTTGTGACTT ATTTAATTCA TATTAATATA TTAGGCTTCC      60
CAACTGACGG TGTTCAGTT GAGCTAGCTT CCAGTTTGG AGAAACACAT AGTTGATTAG      120
TTCTGTCACT AATTTTCAGG GATATTAATA TAACTTTGAT ATTAGTGAGA AATTTTCTTT      180
CAGTAGTAAA ATGTTTTCTA ACTTAGGAGC TGTCTCGAG      220
```

(2) INFORMATION FOR SEQ ID NO:698:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:698:

```
GAATTCGGCC AAAGAGGCCT AGCAGAGCTT TCATATCCAC GATGCGTTTT CTGGCCGCCA      60
CGATCCTGCT GCTGGCGCTG GTCGCTGCCA GCCAGGCGGA GCCCCTGCAC TTCAAGGACT      120
GCGGCTCTAA GGTGGGAGTT ATAAAGGAGG TGAATGTGAG CCCATGTCCC ACCGATCCCT      180
GTCAGCTGCA CAAAGGCCAG TCCTACAGTG TCAACATCAC CTTTACCAGC GGCACTCAGT      240
CCCAGAACAG CACGGCCTTG GTCCACGGCA TCCTGGAAGG GATCCGGGTC CCCTTCCCTA      300
TTCCTGAGCC TGACGGTTGT AAGAGTGGAA TCAACTGCCC CAGTACAGTC GAG      353
```

(2) INFORMATION FOR SEQ ID NO:699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:699:



GCGATTGAAT	TCTAGACCTG	CCTCGCTTCC	CCACCCTTAC	TAACATTAAC	GAAAAATAACC	60
CCACCCTACT	AAACCCCAT	AAACGCCTGG	CAGCCGGAAG	CCTATTGCA	GGATTTCTCA	120
TTACTAACA	CATTTCCCC	GCATCCCCCT	TCCAAACAAC	AATCCCCCTC	TACCTAAAAC	180
TCACAGCCCT	CGCTGTCACT	TTCCTAGGAC	TTCTAACAGC	CCTAGACCTC	AACTACCTAA	240
CCAACAACT	TAAAATAAAA	TCCCCACTAT	GCACATTTTA	TTTCCCCAAC	TCCTCGAG	298

## (2) INFORMATION FOR SEQ ID NO:700:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:700:

GAATTCGGCC	TTCATGCTTA	GCCTCAGCTC	TTTCTTCTGG	GTTGTTTGTA	TTTTCTTTTC	60
TGTCCCAAAC	AGTTTCCCC	ACAAAAAGAA	CTTTATGTCT	TTCTCTGTCT	TCCTCAGTC	120
CTTCCAGTCA	GCAGCCTGTG	ATTGGGCTTT	TCCCCTCAGA	AACGAACAAT	CCAGAACCCA	180
CTGTTTAAAA	CAACTGTATT	TTGCCTTGGG	AAGTCCCATT	GCCTTCCCTG	AAAACATTAA	240
ACATTCCTCC	GATCCCCAGC	CTGAGTCTCT	CTGTCTCTGG	GCCCCATCCT	GCTCCACAGC	300
AGGGCTGGTG	TGTCCAGCAC	AGAGTGACCC	TCCGATGCCC	TTTCCCACCC	GCCGCCCTGC	360
CTCCCTCGAG						370

## (2) INFORMATION FOR SEQ ID NO:701:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 515 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:701:

GAATTCGGCC	TTCATGGCCT	AGGAAAGATC	TAATTATCAT	GGACCTGCGA	CAGTTTCTTA	60
TGTGCCTGTC	CCTGTGCACA	GCCTTTGCCT	TGAGCAAACC	CACAGAAAAG	AAGGACCGTG	120
TNCATCATGA	GCCTCAGCTC	AGTGACAAGG	TTCACAATGA	TGCTCAGAGT	TTTGATTATG	180
ACCATGATGC	CTTCTTGGGT	GCTGAAGAAG	CAAAGACCTT	TGATCAGCTG	ACACCAGAAG	240
AGAGCAAGGA	AAGGCTTGGA	AAGATTGTAA	GTAATAATAGA	TGGCGACAAG	GACGGGTTTG	300
TCACTGTGGA	TGAGCTCAAA	GACTGGATTA	AATTTGCACA	AAAGCGCTGG	ATTTACGAGG	360
ATGTAGAGCG	ACAGTGGAAG	GGGCATGACC	TCAATGAGGA	CGGCCTCGTT	TCCTGGGAGG	420
AGTATAAAAA	TGCCACCTAC	GGCTACGTTT	TAGATGATCC	AGATCCTGAT	GATGGATTTA	480
ACTATAAACA	GATGATGGTT	AGAGACGTTT	TCGAG			515

## (2) INFORMATION FOR SEQ ID NO:702:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:702:

```

GAATTCGGCC TTCATGGCCT AGGGGACCTG ACGTTCACTG TGGCCCAAAA GATGGCTGAG      60
CCAGAGAAGG CCCCAGCCCT CAGCATCCTG CTGTACGTGC AGGCCTTCCA GGTGGGCATG      120
CCACCCCTG GGTGCTGCAG GGGCCCCCTG CGCCCCAAGA CACTCCTGCT CACCAGCTCC      180
GAGATCTTCC TCCTGGATGA GGACTGTGTC CACTACCCAC TGCCCGAGTT TGCCAAAGAG      240
CCGCCGAGA GAGACAGGTA CCGGCTGGAC GATGGCCGCC GCGTCCGGA CCTGGACCGA      300
GTGCTCATGG GCTACCAGAC CTACCCGCAG GCCCTCACC TCGTCTTCGA TGACGTGCAA      360
GGTCATGACC TCAAGCTCGA G

```

## (2) INFORMATION FOR SEQ ID NO:703:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:703:

```

GAATTCGGCC TTCATGGCCT AGCTCCACTT TCTCTGAAAA TTTATTCATA TTGTTAATTA      60
AATTTGTTTT TATTATAGAA ATAATATATT GCATGATTG TAAAAATGCA GAGGAACAGA      120
ATGGCACAAA ATTATGTAAC CCTTCTATC TCCCTTGGT GTACCTCCTT AATCATACTT      180
CTCAGAACCA TTGTCAATAA TTTGCTGGGA GTTCTTCTGA TGGTTACCAT CGTGACTGAT      240
AGATTTATTT CCCAGGTTCA AGCGGTTCCC CTGCCTCAGC CTCCCGAGTA TCTGGGACTA      300
CAGGCATGCA CCACCACTCA GCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:704:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:704:

```

GAATTCGGCC TTCATGGCCT TGCCTTTTTT CTTCACCAC TTTACTACAC ACAATTACTG      60
GATTAATCTC TTTAATGCCG AGATCTTTT TCCTTAGTGA CACCTTAATC ACTCTTAGCT      120
TAACATATAT GGTATCCAT TACTGGGTTG CCTCTGCCTT TCCAGGATTG GCTGCCACTG      180
CTCCTCCACA TACCCTGTAT TCTAGCCAAA TGGAACTACT GCTGTGTCCC AAGCAGATTC      240
TTTATTTCTC TTGGCTGTTG CTCTCTATT CTAAATGCTAC CTGCCCTTCA AAATCGAG      299

```

## (2) INFORMATION FOR SEQ ID NO:705:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:705:

```

GAATTCGGCC TTCATGGCCT ACTTGATTG TGGCTTATCT CAAGTTACCA TTTTTCAGTC      60
AAGTCTGTTT GTTTGCTTCT TCAGAAATGT TTTTACAAT CTCAAGAAAA AATATGTCCC      120

```

AGAAATTGAG	TTTACTGTTG	CTTGTATTG	GACTCATTG	GGGATTGATG	TTACTGCACT	180
ATACTTTTCA	ACAACCAAGA	CATCAAAGCA	GTGTCAAGTT	ACGTGAGCAA	ATACTAGACT	240
TAAGCAAAAG	ATATGTTAAA	GCTCTAGCAG	AGGAAAATAA	GAACACAGTG	GATGTCGAGA	300
ACGGTGCTTC	TATGGCAGGA	TATGCGGATC	TGAAAAGAAC	AATTGCTGTC	CTTCTGGATG	360
ACATTTTGCA	ACGATTGGTG	AAGCTGGAGA	ACAAAGTTGA	CTATATTGTT	GTGAATGGCT	420
CAGCAGCCAA	CACCACCAAT	GGTACTAGTG	GGAATTTGGT	GCCAGTAACC	ACAAATAAAA	480
GAAGTAGTCT	CGAG					494

## (2) INFORMATION FOR SEQ ID NO:706:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:706:

GAATTCGGCC	CTTCATGGCC	TACTCCCGAG	CTCTACTGAC	TCCCAAAAGA	GCGCCCAAGA	60
AGAAAATGGC	CATAAGTGGA	GTCCCTGTGC	TAGGATTTT	CATCATAGCT	GTGCTGATGA	120
GCGCTCAGGA	ATCATGGGCT	ATCAAAGAAG	AACATGTGAT	CATCCAGGCC	GAGTTCTATC	180
TGAATCCTGA	CCAATCAGGC	GAGTTTATGT	TTGACTTTGA	TGGTGATGAG	ATTTTCCATG	240
TGGATATGGC	AAAGAAGGAG	ACGGTCTGGC	GGCTTGAAGA	ATTTGGACGA	TTTGCCAGCT	300
TTGAGGCTCA	AGGTGCATTG	GCCAACATAG	CTGTGGACAA	AGCCAACCTG	GAAATCATGA	360
CAAAGCGCTC	CAACTATACT	CCGATCACCA	ATGTACCTCC	AGAGGTAAC	GTGCTCACGA	420
ACAGCCCTGT	GGAAGTGAGA	GAGCCCAACG	TCCTCATCTG	TTTCATCGAC	AAGTTCACCC	480
CACCACTCGA	G					491

## (2) INFORMATION FOR SEQ ID NO:707:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:707:

GAATTCGGCC	TTTATGGCCT	ACCTTATCTT	CTTAACCTTT	CAAATACTTG	CAGATATTTT	60
GCTTGGTGCT	TCCCATCTAT	TGCAATACCC	CTTTAGATAA	AGTCAATTCT	TATCTAAAAT	120
CAAATTCATT	TTATTTGACA	ATGTTTACAA	ACAACCCAG	GACGATAACA	ATTACACTCT	180
CAATACTGGC	ATCACACCTT	CACAATTACA	CTAACCCCAA	CCTAGGCCAT	GAAGGCCTCG	240
AG						242

## (2) INFORMATION FOR SEQ ID NO:708:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:708:

GAATTCGGCC TTCATGGCCT AGACAGAATT ACTGGGAACC ATTTTCCAAG TAGCCCACCA	60
CAAAGGTTGT ATTTTGTCAA ATTGAAGGAG TCATCTGACT TTCCTTAATC ATAAGCTACA	120
AATATAATAA GCTACATTAA TAGATTTTCT AATATTTATT TAACTTTGAA TTTCTGGAAA	180
AAACCCAACT TGGTAATGAT TTATCATCTG AGCTTGTTT TGGCCTTGG TATGCTAATT	240
TTTGGCTTAG GATTTTATA TCTATTTTAT GAGTGGCACC TCGAG	285

## (2) INFORMATION FOR SEQ ID NO:709:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:709:

GCACGCCATG GGAGAAAAAG AAGAAGCCAA AAAACAGAA GACAAGTCTT TGGCAAAGCC	60
TGAAACTGAT AAAGAACAGG ACAGTGAAAT GGAGAAGGGT GGAAGAGAAG ATATGGATAT	120
AAGTAAATCT GCAGAGGAGC CACAGGAAAA AGTTGACTTG ACTCTAGATT GGTAACTGA	180
AACCTCTGAA GAGGCAAAAG GAGGAGCAGC ACCAGAAGGA CCGAATGAAG CTGAGGTCAC	240
TTCTGGGAAG CCAGAACAGG AAGTACCAGA TGCTGAGGAA GAAAAATCAG TTTCTGGAAC	300
TGATGTCCAA GATCTCGAG	319

## (2) INFORMATION FOR SEQ ID NO:710:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:710:

GAATTCGGCC TTCATGGCCT AGACACATAC AAAGATAAGG CTTTGATAAA ATTCAAGAGT	60
TATTTGTATT TTGAGGAAAA AGACTTTGTG GATAAAGCAG AGAAGAGCCT GAAGCAGACT	120
CCCCATAGTG AGATAATATT TTATAAAAT GGTGTCAATC AAGGTGTGGC TTACAAAGAC	180
ATTTCTCGAG	190

## (2) INFORMATION FOR SEQ ID NO:711:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 199 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:711:

GGATTGAATT CTAGACCTGC CTCGAGTAAG ACCCTTTTT AAAATGACTC CCACTGTCTA	60
TTCCACAGCC GGTGTGCGGC ATGCTGATTC AATCCCCACA ACAGCCCAGG AGGTAGGCGC	120
CGTCCCATCC TCCTTTACAG GAGGGGAAAC TGAGGTTCAG GTGGTCAGAT GGTGAGCTGC	180
CTCCAAGACC ACGCTCGAG	199

## (2) INFORMATION FOR SEQ ID NO:712:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:712:

GAATTCGGCC	TTCATGGCCT	ACCTGTACCT	GTTTATACT	TGCTTTTGCT	TCAGCGTTCT	60
GTGGTTGTCA	ACAGATGCCA	GTGAGAGCAG	GTGCCAGCAG	GGGAAGACAC	AATTTGGAGT	120
TGGCCTGAGA	TCTGGGGGAG	AAAATCACCT	CTGGCTTCTT	GAAGGAACCC	CCTCTCTCCA	180
GTCATGTTGG	GCTGCCTGCT	GCCAGGACTC	TGCCTGCCAT	GTCTTTTGGT	GGCTAGAAGG	240
GATGTGCATT	CAGGCAGACT	GCAGCAGGCC	CCAGAGCTGC	CGGGCTTTTA	GAACACTCCT	300
CGAG						304

## (2) INFORMATION FOR SEQ ID NO:713:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:713:

GAATTCGCCC	TTCATGGCCT	ACCCAATTCA	GTTTCCAGAG	GAGGTGGAAC	CTTCTGCAAC	60
CCAACAGGAG	GCCCCAATTG	AGCCTCCAGT	TTCTCTATG	GAGCATGAAC	TTTCCATCAG	120
TGAGCAGCAG	CAGCCAGTTC	AGCCTTCTGA	GTCTTCTAGG	GAGGTGCAAT	CTTCTCTGAC	180
CCAGCAGGAG	ACCCAGGTC	AGCCTCCAGA	ACATCATGAA	GTCACAGTTT	CACCTCCAGG	240
TCACCATCAA	ACTCATCATT	TAGATTCAAC	CAGTGTCTCT	GTGAAGCCTC	CAGACGTGCA	300
GCTCACCATA	GCAGCAGAGC	CTAGTGCAGA	GGTGGGAACT	TCTCTAGTCC	GACCCCTCGA	360
G						361

## (2) INFORMATION FOR SEQ ID NO:714:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:714:

GAATTCGGCC	TTCATGGCCT	ACCGAGATGG	AAATAACCTA	AGAAAAAGAG	GGCATCCAGC	60
TCCATCTCCC	ATTTGGCGTC	ATGCTGCTCT	GGGTCTGGTA	ACTCTTTGCC	TGATGTTGCT	120
GATTGGGCTG	GTGACGTTGG	GGATGATGTT	TTTGACAGATA	TCTAATGACA	TTAACTCAGA	180
TTCAGAGAAA	TTGAGTCAAC	TTCAGAAAAC	CATCCAACAG	CAGCAGGATA	ACTTATCCCA	240
GCAACTGGGC	AACTCCAACA	ACTTGTCAT	GGAGGAGGAA	TTTCTCAAGT	CACAGATCTC	300
CAGTCTTAAC	CTCGAG					316

## (2) INFORMATION FOR SEQ ID NO:715:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:715:

```

GAATTCGGCC TTCATGGCCT AGGCAATATC AAGGTTTTAA ATCTCGGAGA AATGGCTTTC      60
GTTTGCTTGG CTATCGGATG CTTATATACC TTTCTGATAA GCACAACATT TGGCTGTACT      120
TCATCTTCAG ACACCGAGAT AAAAGTTAAC CCTCCTCAGG ATTTTGAGAT AGTGGATCCC      180
GGATACTTAG GTTATCTCTA TTTGCAATGG CAACCCCCAC TGTCTCTGGA TCATTTTAAG      240
GAATGCACAG TGAATATGA ACTAAAATAC CGAAACATTG GTAGTGAAAC ATGGAAGACC      300
ATCATTACTA AGAATCTACA TTACAAAGAT GGGTTTGATC TTAACAAGGG CATGAAGCG      360
AAGATACACA CGCTTTTACC ATGGCAATGC ACAAATGGAT CAGAAGTTCA AAGTTCCTGG      420
GCAGAAACTA CTTATTGGAT ATCACCACAT CTCGAG                                456

```

## (2) INFORMATION FOR SEQ ID NO:716:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:716:

```

GAATTCGGCC TTCATGGCCT AGATCATTCA GTGGCTCACC TAATATCACA GAACAAGTGG      60
TGGAGTCAGA ATCTTTTATC TAAAGGAGAT ATTTTCATCC TTAGATTAAT GTCCTCTTCA      120
CAGTCTCATG CTACTTTCCT TTAAAATGAA ATTGCTGTTC TTTTTTTAAT TGATTGGGCC      180
AACTTCATTT GTAACGGAAG AATCAAATT AGAGCCCGGG TCTCATCCTA CGGTATCTCG      240
TCCTGAACCT CTGGTCTCCC TCAAGAATGA CTCAGAAGGA CGGACTCGAG                                290

```

## (2) INFORMATION FOR SEQ ID NO:717:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:717:

```

GAATTCGGCC TTCATGGCCT AAAAAAAAAA GCCTTTTAAA CTTGTAGGAA TTAAGAAATA      60
AGAATAACCT ACAAATGCT AGCAAAATTT ATCTCATTTT TTTTCATTGT ATTTTCAGGT      120
TTAACTGAAC TGAATGACAG TCCAGTTCCC CTAGAACTTG AGCGCTGCAA GTCTCCTACC      180
TCAGACCATG TAAATGGACA CTGCACAAGT CCAACTTCTC AGAGTTGCAG TTCTGGAAAA      240
CGTCTTTCTA GTGCCGATGT TTCAAAGTA AATCGCTGGG GTCCTGGAAG ACCACCAGTT      300
CTCGAG                                306

```

## (2) INFORMATION FOR SEQ ID NO:718:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 294 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:718:

GAATTCGGCC TTCATGGCCT AATATTTATT AAATGACTTG GTAGATAGAG CAACTGACTG	60
AATATATTAT TTTTATAGGAA GAAGAAGAAC ATTTTGTCTT AAATTAAATT TCTTATTTTA	120
TTTCTCTTTC CCCTTTTATC CAGGGTAGGT CCAGGTAAAG CCAAAGGCCT TATCCTTATC	180
TACACTGCTG GGGGACACAA CACAAGAATT TCAAGTTCAA GTATTATTTT TCATTTTGAG	240
TAATTTTGTT CTCATTTTGT TCCAGTTCTC ACTCTCAGAA AAAGATTACT CGAG	294

(2) INFORMATION FOR SEQ ID NO:719:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 263 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:719:

GAAACAATAG AAACACTGAG AGAAAATTCA GAGAGACAGA TTAAGATACT GGAACAGGAA	60
AATGAACATC TGAATCAAAC AGTGTCTTCC TTAAGGCAGC GGTCCCAGAT AAGTCAGAA	120
GCAAGAGTGA AAGACATTGA AAAAGAAAAC AAAATTCTTC ATGAATCTAT CAAAGAAACA	180
AGTAGCAAGC TAAGCAAGAT TGAATTTGAA AAAAGACAAA TTAAAAAAGA ATTGGAACAT	240
TATAAAGAAA AAGGAAGCTC GAG	263

(2) INFORMATION FOR SEQ ID NO:720:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 320 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:720:

GAATTCGGCC TTCATGGCCT ACCTGCCCTT CTGCGGTCAC AGCTGCCTGC TGGGTGGGAG	60
TCCGGGGGAA TGGTATGTGT GGTCACCAGA GGGCACTGAG TGGGCTTCAG TGGCATGTGA	120
ATCCTGGCAG AGTCTCGGAT CCCGATGGG GAGAGGAGAA AGCACAAGCC AAGACAACGA	180
GTGGGGGAAG GAGGCAGGGG CTAAGTGACG GGTGGGGGGT GGGGGTGGGA ACTCCAGTGT	240
ACACATTGAC AGTCTCTATG TTGGCTTCAC CAGCGCTTCT CTGTTTGTCT CGTCCCTGGA	300
TTTCTAACAG TTGCCTCGAG	320

(2) INFORMATION FOR SEQ ID NO:721:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 292 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:721:

GAATTCGGCC	TTCATGGCCT	AGTCGGGAGT	GTCTTAAGCT	TTTCATTTAA	CCTAAAGTAC	60
AGAGTCTGCT	CTGTAGAAAT	ATGTCATTAA	GAAAATATTT	GAGTCCCAGC	TCCTCCTTGT	120
TGTGTAATGT	CTGATAATTT	CACTCATTA	ATTACCCAGA	CAGACCATAA	AGTCCTCTCA	180
GTTTGTCATCA	CCTGAAAGTC	AGTCAGCCTG	GGCTGTGAGG	ATTGTGAGGT	AGAACTCACT	240
GTGGAAGGAC	GGCATTAGGG	AAGACTTTAG	GAAAATGGAG	CGGAACCTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:722:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:722:

CTCGAGACCT	GTGTGCGCAG	GCAACGGGGA	AACTGGAAAT	GCGTTGACAA	ACTGACGCAA	60
AACTGGGCCC	AACAGCCACA	AGGCACTGGT	CGTTTTCCAC	TGGGCAAAGT	TCAGTCGCAT	120
TTCTTTCTGT	TCTCTTTCTT	TCTTTCTTTT	CTTTTTTCTC	TTTCTTTCTT	TCTTTCTTTC	180
TTTCTTTTTT	CTTTCTCTCT	CTCTTTCTGT	CTGTCTCTCT	CTTTCTTTCC	TTCTTTCTTC	240
CCTTCCTTCT	TTCTTTCTTC	CCTTTCTCTT	CTTTCTTTTT	TTTTTCTTTT	AAGAGACGGA	300
GTCTCGCTCT	GTTACCCAGG	CCGGAGTGCA	ATGGCACAAAT	CTCGGCTCAC	TAGGCCATGA	360
AGGCCGAATT	C					371

(2) INFORMATION FOR SEQ ID NO:723:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:723:

GAATTCGGCC	TTCATGGCCT	AGTTCCTTGG	TGGTTTGAAA	GTTAGAGAGA	TCCTGATAAG	60
CATAATGACC	AACATAGAAG	AGATTAAAGTA	CCTTTACTCA	TAAATGTGAG	TTACAGACT	120
TCAGGTCTAA	ATTCGTAACA	ATATTTAAGA	TGTATATGGC	TTAAAGTGCT	GGTAGTTTTG	180
ATTAGAATCC	ATAGGTTTCT	AGTCACTGCT	CTTTTCATTA	TTTGAGTTTT	TATGTATTTT	240
TTAACTAGAA	ATAAGAGGGT	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:724:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:724:



```

GAATTCGCCT TCATGGCCTA GAAAGTTTTT CAAAAATTCT TCAATTGTCT CTGTTGATG      60
CAACTTAATT TTTTGCTGAG AGAGACCTTA AATGTAATTA GTATTGTATA ATTACCTGA      120
TTAATCTGAC CTGTACATCA CGAGTCACTT GTCTTTAGCC CAAGAGGAAT GCTTCCTTTC      180
TGATTTGAGG CAGTGGCCCA TCATGCTTTC TAGCAACCTT CCTACTTACT AGATGACCTT      240
GAGTCAAGGT TTCTGTATAT ATGATTTTCAG ATTTGTCCCC TAGAACTGAA AAAGGGTAGG      300
AGAGGCAAAG ATAGGAAAAA TATTTTAA AAATTTTAA GTATTTTATT TTTATTGGGA      360
AAATATTAT TGTAAGTCTT CCATTTGTTA TCCTTCTGCC ACTAGCATTA CGTAAAAAGT      420
AAAAAGAGCT TTACATCAAA AAGCACAATG AAACTTTSTA TCCTTAAGTC CGTACTCGAG      480

```

## (2) INFORMATION FOR SEQ ID NO:725:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:725:

```

GAATTCGGCC TTCATGGCCT AGTCGGAGGT GTAGGAGGGG CCGTGGAGGT CCAGGTGACT      60
GCTTAGAAAA CTGCACAGCA TCTGATGAAA TTAGCGAATA AGAACATCAA CCATGTCTTA      120
CACTCCAGGA GTTGGTGGTG ACCCCGCCCA GTTGGCCAG AGGATCTCTT CTAACATCCA      180
GAAGATCACA CAGTGTCTG TGGAATACA AAGAACTCTG AATCAACTTG GAACACCTCA      240
AGATTCACCT GAATTGAGGC AACAGTTGCA ACAGAAGCAG CAGTATACTA ACCAGCTTGC      300
CAAAGAAACA GATAAGTACA TTAAAGAGTT TGGATCTCTG CCCACCACCC CCAGTGAACA      360
GCGTCAAAGG AAAATACAGA AGGATCGCTT AGTGGCAGAG TTCACAACAT CACTGACAAA      420
CTTCCGCAAG GACTCGAG                                     438

```

## (2) INFORMATION FOR SEQ ID NO:726:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:726:

```

GAATTCGGCC TTCATGGCCT AGCTACCTAT CTACAAAAAC TCCTGGATCC TTTATTACGA      60
ATTGTGATCA CATCCTCTGA TTGGCAACAT GTTAGCTTTG AAGTGGATCC TACCAGGTTT      120
GTCATCTTTT CACATAGAAC CGCTGTTTTT TGTTTTTTTT TTTGTTTGT TTGTTTTACT      180
AACACTGCAT GAAGCAAGGC ACCTTCTCCC CTTGATCATT AAAATTAGTT TTTAATTATA      240
AAAGTTATAT ACAAATACAC GTTCTTTTAA TGATATCTGT AATTTTTTTT TAAGGTATCC      300
TTTTATTTGC CTTAGATCCA GGGACAAACT AGAGAAAGGT GTCTTTGACT TCCACCTCCA      360
GAGACTGTTA CTAGTTAAGT CTGTTCCCCT GTCCTTTTTC CATGCACCGC CTCGAG      416

```

## (2) INFORMATION FOR SEQ ID NO:727:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:727:

GAATTCGGCC	TTCATGGCCT	AAGGAGGTCC	ATGAGGAAGT	GTCCCAGCCT	GTCAGTGCAT	60
CTCATGAGTT	CGCTGAGTGA	TCAGCAGACA	GTTCCAGGAA	GTGAACAACT	CCAAGAGGAC	120
TTCTGATTAG	TCCACAGTCT	CCTCTATAGG	CTCAGTAGAT	GAAGGCGTTT	CTGAGGGCTT	180
GCCTACACTT	CAAAGCACGT	CTAGCACTAA	TGCTCCTCCG	GATGATGATG	ATCGATTGGA	240
AAATGTTTCA	TATCCCTACC	AACTCTACAT	TGCTCCTTCC	ACCAGCAGTA	CAGAGCGACC	300
AAGTCCAAAT	GGTCCCGACA	GACCTTTTCA	GTGTCCAACC	TGCGGGGTGC	GATTCAACCG	360
TATTCAGAAC	CTAAAGCAGC	ACATGCTCAT	CCACTCAGGA	ATTAAACCAT	TTCAGTGTGA	420
CCGCTGTGGG	TCTCGAG					437

## (2) INFORMATION FOR SEQ ID NO:728:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:728:

GAATTCGGCC	TTCATGGCCT	AGATCACTGC	CCTTTCAATA	ACACTCTTGC	CTCTAGAATC	60
ATATGTTCAA	AGTATGAATA	CACACCTAGC	ACATAGTAGG	TGCTCAAATA	TTAATTTCTT	120
CCTTGCCCTT	CTTATCTACC	CTGTGTCCTC	CATTTCCCCG	TATGATTCCA	ACCCAATATA	180
GCAAATGACA	TTTACATGTT	ATGAAAACAT	CTATTGGGTA	AAATCAGATC	TTGGATAAAG	240
AAATTCTGAC	TTTTATATAA	GCTTTTGGTA	GACAGAAAAA	ACAGAAAGGT	ATTCTGTTGGT	300
AGAACATTTT	TAAGTTCAGG	AAAGAAAGCT	GGAATAATAC	TACGTAACCT	TGTCCAGGTT	360
ACTTTGACTG	AAACACGTTT	TGGTGGATT	TCTTTTCCTC	AAAGAACTCT	CTAAATGCAA	420
CTCCTTGCTG	GATTCCTCAC	CCGATCTCGA	G			451

## (2) INFORMATION FOR SEQ ID NO:729:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:729:

GAATTCAACC	ATTAAAGATA	ATTTATATTA	GTGTTTCTAT	AACTTCTAAA	ACATCTTTTG	60
ATAAGGATAA	TAATCTCATT	GTCAATCTGT	ACTGATATTT	GGATATAATC	CTAGCAGGGC	120
ATAGCTCTGA	TTAAGAACAA	TTGAACCATT	CAATTTTTTA	TTAGCCTCTA	TTTTCACTAG	180
CCAGGATATT	TTATGAAAC	TTTTTAGTTT	CAAAGCAAGT	TTTTTCTTTC	CAATAGAAAG	240
TGTTATATTA	GTAACAATT	TTGTCTTCTG	CCAAGACCAG	CTCAGTCGGG	AAGATCCTAA	300
CCCAGTGGCA	AAACTCGAG					319

## (2) INFORMATION FOR SEQ ID NO:730:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:730:

```

GAATTCGGCC TTCATGGCCT AGGGAAGAAT AAAGAACAAA ACCCAAAACT TTGGACCTTA      60
AAAAACCCAG GCTGGCATT TAGTAGCAAT TGGGTGTGTT CCGTTTTGAA TATATTTGTA      120
TATACATGCC TCCATGTGCT TTGGCCTTCT GGTATCTTCA CCAGATGCTG CCTTTTTTTT      180
TTTTTTTAAAC AAGTTCCTGT TTCACTTTTC CAGCTAGCTG CTGGGTATCT CCAACAAAAT      240
ATCTCATAGA TCTCCCAACT GTAATGTATT CAAGCCAAAA ATCAGCTCTG CCCATTCTCC      300
ATCCCAAAGC CCCTCCTCTT GGTACCAGA CAACCTTAAC CAAACCACTC GAG              353

```

(2) INFORMATION FOR SEQ ID NO:731:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:731:

```

GAATTCGGCC TTCATGGCCT AGAGGAGGAA GGCCTTCGTA AAGGTTGCAT CTCGTCCTCT      60
TCGCTCCCGG GGACCCGCGG GAAAAAATAA AATCCAACAC CCAGGCCCGG CCGCTAGCCC      120
CTTCCACAG GCTCTCTCCG CTCGATTTTG TCACCGTTAT GTGGGAAGCG AATCCATGTA      180
TTTGCATGCC CGAGTCTTTG AGCCGTGCTA TACCAGTTTG TCCAGATTGT TTATACTAGC      240
AATGCAGTTT ACGGTGAAGA CCTGCCTTCC CTCTGGGAAT CTGGAGCTTC AGTAACAGGA      300
GATGTTTCAC AAAGCAGAAG AATTATTTTC TAAAACAACA AACAATGAAG TGGATGACAT      360
GGACACGTCA GATACCCAGC TCGAG              385

```

(2) INFORMATION FOR SEQ ID NO:732:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:732:

```

GAATTCGGCC TTCATGGCCT ACTCCGTCTC CAAAAAATAA AAAAAATAGT GTTCAGCAAG      60
GTTGAAGCAT AAAAGGTTAA TAGCCAGAAT CATTATCAA TTGTATTTCT ATACATCTAC      120
AAGACACAAT CTGAAAATGA AATTAGAGAA ACAATTTTAC TGGGCAACAA GAGCAAAACT      180
TCATCTCAA ATAATAATA TAATAATAAT AATCATCATC ATCATCATCA TCTACAATGT      240
CATTTCCCAT CCAAGTCTCG AG              262

```

(2) INFORMATION FOR SEQ ID NO:733:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 503 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:733:

```

GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAGCTCCTG GCCTCGGGCA CTCTACCCGC      60
TTCAGCCTCC CAAAGTGCTG CGACTGATTA CAAGTATGAG CCACTACGCC TGACCATAAC      120
ATGTAAAATT ATGGCAAATG GTAATTCACA GCTCAATTCT AAAATGTGAT GAAATTTAAA      180
TCAGAAAGGC CAAATGAGTC ACTTTTCTT AACACTAAGA ATTATAAACC TTAAATTTTC      240
TTTTGTACTG TAATTTTTTA TGTGACATGT ATATGCTTTT TAATATGTGT GATAGGATGA      300
GGGGCAGGAG AGGGGGCTCT AGACATGAGG GTGCCTGGGG CCTCTGTAGA CCTTCAGATG      360
GCCCTGGGTG TTATAGCAAG AGCTGGTCTA CATCTAATAC TACTGCAGGT GCTGTCATGA      420
ATTCTTTGTA TAATCTTTG TATATTAAAT GACATTATTC TATGTATAAT GTCATTTAAT      480
ACTTATAACC TACTTCTCTC GAG                                     503

```

## (2) INFORMATION FOR SEQ ID NO:734:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:734:

```

GAATTCGGCC TTCATGGCNT AATGGATTCA TTTTTTTTCA GCAGCATGGC ATAGTGGATT      60
ATGAAATCAA AATTAACTAC ATGTGGAGTC NTACATTGAA ATCCCCCTTC AACAAAATAG      120
TATACTATGA GTATTTTAA ATTATTTAAC CCCTCCGAAC ACCAATTTGT ACACGAATAA      180
AACTTGACAC AACAGGATTT TGTGGGGCGT GAGTAACACA ACATATACAA AAGCACCTTA      240
TAAAGTGTTT TATATAGCAA CTCTCTCTC AGTTTGAACG GGTCTCAGGA TAAATTAGCA      300
AATATGAATT CTAACCTTTG TACTTACATT TTAATTCTGC TAAGTGTGTG AACCCCAATT      360
TAGCAATTAA AATATTTATT TCCAGAATGT TTTGACCCTG AGCATATTTT TAAAAAGCAC      420
AGTAGCTCGA G                                     431

```

## (2) INFORMATION FOR SEQ ID NO:735:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:735:

```

AAAAGTGACT GAAAGTTTGC TAGTGTTTTT AGTACCGATA TTTACTGGTA GTAAATATAT      60
ACTAAATCCA GTGAAATATG ACTTCTCTAA CTGAGCTTGA CATATCCTGG TTATATCTCA      120
TGGCAGCTGA AACTAGAAA TGAATTATTT TTACCTTGTA GCCACAGCAC ACTTGAGGTT      180
ATTCTTAGGT TTTTGTTAGA GACAAAGCTG GTTAGTGA CTGGATTAA GAATTATGAG      240
TGATCCCAT ACCCTCGAG                                     259

```

## (2) INFORMATION FOR SEQ ID NO:736:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:736:

```

GAATTCGGCC TTCATGGCCT AAAGGATATT GGCATGTTCC TCTTCTCATC AATATCCTAA      60
AAGACATTTA TTTTTCACAC ACTCCTTGGG AAAAATTAAC TTTTTCAC TGAAAATATT      120
TCCTTTTGTG GTTATCTTGA TCTCAGATTA TTTTGTGAAA GAATTTTACT GTACTTAGTT      180
CAAAAGAGTA GAAAGAATGA TTTACTATTG CAGACATATG TAGGGTAAAA TCATAATTTA      240
TTTAACTGA CTGTACAACA CCATTTAGAG TTGATATTGA CATAAATGTT ATTAGCCTAC      300
TAATTTGGAA CTGCATTCT CAACAATGCT GGCAAGCATC TTCCGTACTT AGCATACCAA      360
GTTGTAGGGG AGAGACTGTG TATATATTTT TTTAAAGCAA TCCAATGGAT TTGTTTTTGT      420
TCATATTTTG GAAACAACCTC GAG                                         443

```

(2) INFORMATION FOR SEQ ID NO:737:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:737:

```

GAATTCGGCT TCATGGCCTA CAAAAGATGG CCCTAAGCCT GGCCTCTAGC TTTCCTCGT      60
GGTGAATATT TCAGACCTAA AGATCCAGAT AGTATCTCTG TTCATATGTG AATAAGTTGA      120
AGATTGTGGG GCTACTTTT CTCTAGCAC TTTATTTTGA ATGTTGTTAG TTGTGCTGA      180
GAATGGTCGT CCGTATTTGA ACCAATTATT TATTTTAAAA TATATTTAAG CTACATTTTT      240
GTTTTGAAAA ATTGCCATAA ATTTGGTGCC ACTTCTTTT ATTTATTTGA CTGAGTTAAT      300
ATTATTGTAT TAACATTTTA AGTATATGGT GTTTACATTC TTATTTCTTT TGACATTTTG      360
GAAATAATCA TAACCTGTCT TTCCAAAATA ACCATTTTCT TGATGGAAC CTCTCTAGAG      420
TTTTTACCAA ATAGCTAACT TTAGTAGTAA AACCTCATG TGTATCCATT CCCCCTCG      480
AG                                         482

```

(2) INFORMATION FOR SEQ ID NO:738:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:738:

```

GAATTCGGCC TTCATGGCCT AGATTGTCAG TTTATCTTAG ATGATGAGGA AGCAGTACCA      60
AGAAAACACT TGGGGGTTGA TACAACAGGC ACATGAGCCC TTAAACTCC TTCCTGTTTT      120
TTTTCTTTT TTTTCTCTT AGGTAGATTA GTGCATTTAA AGCCTGAAGT TAATTTGACC      180
TAAATTTTT ATAAGTCTTT GCAGAAAGTT CACTTGTTTC CTGAAATCAT CTCCTTGATA      240
ATTTTTTATG TAACAGTTGT TCATATTGTA GGAATGATAT ATATGTCATC CTGTTACACG      300
TGTCAGGCAC TTCAAAAAGA CTCCAAGAGA ACATGCCTGA GAAAGATAAC TCCCAATTAA      360
AAATGATTCA GTCCCTCACT TGCAATATTC AGGATAAATG TGTGGAAACA TTAGGCTACC      420
AGATAAATAA AAGGTAGTTA TTTCTAGGG TGACTCAGCA AGATATTTCT CGAG          474

```

(2) INFORMATION FOR SEQ ID NO:739:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 211 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:739:

GAATTCGGCC	TTCATGGCCT	AGCCTTTGAG	ATCAATACCT	GTGAAAAGTA	GGGAAAGAAA	60
GCAGATGAGG	CATAGGGAAA	AGGTGGACTG	CCACAGGCAA	CCCAGCGAAC	CTCACCAGCA	120
GCTCTGGAGC	TAAAATAGCT	CTTCAGAAAT	GTCCAGAGTT	GGGCTGAGGA	GGCCAGAATT	180
TTATTTGTGT	TCCCACGATG	ACGACTTCGA	G			211

(2) INFORMATION FOR SEQ ID NO:740:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 377 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:740:

GAATTCGGCC	TTCATGGCCT	AAATACCTTA	ATGGTGGTAG	AGCCTTTACC	TGTAGCTTGA	60
AAGGGGAAAG	ATTGGAGGTA	AGAGAGAAAA	TGAAAGAACA	CCTCTGGGTC	CTTCTGTCCA	120
GTTTTAGCA	CTAGTCTTAC	TCAGCTATCC	ATTATAGTTT	TGCCCTTAAG	AAGTCATGAT	180
TAACCTATGA	AAAAATTATT	TGGGGACAGG	AGTGTGATAC	CTTCCTTGGT	TTTTTTTTGC	240
AGCCCTCAA	TCCTATCTTC	CTGCCCCACA	ATGTGAGCAG	CTACCCCTGA	TACTCCTTTT	300
CTTTAATGAT	TAACTATCA	ACTTGATAAA	TAACCTATAG	GTGATAGTGA	TAATTCCTGA	360
TTCCAAGAAT	GCTCGAG					377

(2) INFORMATION FOR SEQ ID NO:741:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 343 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:741:

GAATTCGGCC	TTCATGGCCT	AAGGCGTTTG	GGGTTTCCTA	GTTGTGCTGC	TGCTCTTGCC	60
TAGGGAATCT	GCTCTTGCTT	TGGCCTCTTT	CCTTGGGGCA	AGAGTGAGGG	GGACAGGGAG	120
CTTCAAGTCA	GCCCTCCATG	TGGAAGTTTG	GTAGAAGCTC	TGCCCACACC	TTGGACTGGA	180
ACCCAGCCAT	GCCAATCCCC	ATGATCACCA	ATCCGAACCC	CTTGAAGTAG	AATTTTCATA	240
CCCTACTGAC	TAACCACTT	CTTAGCCAGG	CCATAGCCAT	TCAGCAGTGC	CTCCTTCCTC	300
TGGGTAGACA	AACAGCCTTG	AACAGAAAGG	TGGAACACTC	GAG		343

(2) INFORMATION FOR SEQ ID NO:742:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 259 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:742:

```
GAATTCGGCC TTCTGGCCTA GAGTCCTTGT TGTCTTTGTC AAAGGTTGCT CATCACCTCT    60
CCCCCTCCCTC TGGCTCTTTT CCGTGGTGAT GCATAGTTCA ATGCGCCCAG GAAGCTTCAT    120
GATGAGGCCG TCACCCAAAC TAGCAGCCCT CCTTTCCTTC TTTCTTTGCC AAGTGTCTGT    180
GACATCAGCT CTTCTCAGT CTTTGACTCT AAATAAAGAA CTTGAATTC ACCATTCAAC    240
TGAAATCCCT CTAACCTCG                                         259
```

(2) INFORMATION FOR SEQ ID NO:743:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:743:

```
GAATTCGGCC TTCATGGCCT ACACCGTCGC CATTGCCAGA AAGAGCGATT TATGGCTTTG    60
TTCTTTTCTT AAGCTCCCAA TTTGGCTTCA TACTTTACCT CGTGTGGGCC TTTATTCTGT    120
AATCTTGGCT AAACCTCTTA GGTTTAACCT ATTGGCCTCA AAAATATTGG GCAGTTGCAT    180
TACCTGTCTA CCTCCTTATT GCTATAGTAA TTGGCTACGT GCTCTTGTTC GGGATTAAACA    240
TGATGAGTAC CTCTCCACTC GACTCCATCC ATACAATCAC AGATAACTAT GCAAAAAATC    300
AACAGCAGAA GAAATACCAA GAGGAGGCCA TTCCAGCCTT AAGAGATATT TCTATTAGTG    360
AAGTAAACCA AATGTTCTTT CTTGCAGCCA AAGAAGCTTA CACCAAAAAC TGAAGTGTGT    420
GTAACCATAG TAACACCAAG CACACTCGAG                                         450
```

(2) INFORMATION FOR SEQ ID NO:744:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:744:

```
GAATTCGGCC TTCATGGCCT AAATCTTCAG GGTCTTAACT TAGTTTTTGA TCCCTAAAAT    60
TAGTGCTGCA TATGTAGACT CAGAAACCTC ACGTAAAAAT TTAAATTGGC CTCAGGTTGG    120
CAATGTTCCA AGGCAATGGT TAGAAGCAAA TTCAGATTCT CCAAGGCCTC AAATAATTCC    180
TACAGATAAA ATCCCAAGGA AATTCAGCAG TGCCTAGTCA AAAATCCACA AATCAGGCTC    240
GAG                                         243
```

(2) INFORMATION FOR SEQ ID NO:745:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 236 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:745:

```
AAGCGAGGCC CTGGGGGACA ACGTGAAACA ATACTGGGCT AACCTAAAGC TGTGGTTCAA      60
GCAGAAGATC AGCAAAGAGG AGTTTGACCT TGAAGCTCAT AGACTTCTCA CACAGGATAA      120
TGTCCATTCT CACAATGATT TCCTCCTGGC CATTCTCACG CGTTGTCAGA TTTTGGTTTC      180
TACACCAGAT GGTGCTGGAT CTTTGCCTTG GCCAGGGGGT TCCGCAGCTT CTCGAG      236
```

(2) INFORMATION FOR SEQ ID NO:746:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:746:

```
GAATTCTAGA CCTGCCTCGA GCCTGCAGAC ATCTCCTCCT TCTTTGTGGT TCTGGGAGCC      60
ATTCTGTGCC TCTAAGGTCC TCTTTCTTTT TTCTACCAA TACACATATT TTCTGTCCTT      120
CGCAATTCTA TTAAACCTCA CATTTGATGG TTGTTTCTT AAAATTCCTT TACTTGGTTC      180
CTGCATTCTT CATTCCTTCC CAGCACAATC TCGAG      215
```

(2) INFORMATION FOR SEQ ID NO:747:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:747:

```
GAATTCGGCC TTCATGGCCT AGAAGAAAAC CCATCAGATA TTATAATAAG ACAATAACTC      60
AATTTTCAGAC TTGTAAACAA AGGTGACATT AATCTATTGA AATGTGGGAA AATAGTCAAC      120
CTGTATCCTT CTCATACCAT AAATCAGCAT GTTTGATCAC TGGAAGCTTC ATTTTGATGA      180
TTAGCAGTCA TGTATTGAGG CTAAATGATA TGTTTGTTCG ACAGCATCTC GAG      233
```

(2) INFORMATION FOR SEQ ID NO:748:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:748:

```
GAATTCGCCT TCATGGCCTA CACAGGAGAA AAACCCTATG AATGTAGTGA ATGTGGGAAA      60
ACTTTTGTTC AGAAGTCCAC CCTCAGAGAT CATCACAGAA TTCACACAGG GGAGAAATCC      120
TTTCAATGCA ATCAATGTGG AAAAACATTT GGCCAGAAGT CAAACCTCAG AATACATCAG      180
```



AGAACTCACA CTGGGGAGAA AACTTACCAG TGTAATGAAT GTGAAAAATC CTTCTGGCGA 240  
 AAAGATCATC TCATTCAACA TCAACTCGAG 270

## (2) INFORMATION FOR SEQ ID NO:749:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:749:

GAATTCTAGT TTAATTACAT ATACCTCTCT GTTGGCTTAG TAGTAATAAA AATATTTTCT 60  
 GTAGGTGTAG AATATCCTTA CAGTCCAAAA GGAGAGTACA TGTTCAACAAT TAAAGTTTGA 120  
 AATTTGTGCT TTGATAACAG CATGTTTTAT TCATTCATTT TTATAATAAT ATTACTGAGC 180  
 CTGTATCATA TAGTGATGAA CTTTTCAGCT GTTTGGAGGG TTGTGTGTTAG CCACATTCAC 240  
 ATTTGTATAA CCTGTGTTTC TTTTATTATT TTCTTTATTT TCATTTTAGA TTCAGGGGGT 300  
 CGGCTCGAG 309

## (2) INFORMATION FOR SEQ ID NO:750:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:750:

GAATTCGGCC TTCATGGCCT AAGCTCTTTT AGTGAAGGAT TGTTTTAAAT AAGAGCTCTC 60  
 AGTTCAAGAC AACTACTGTT AGGAGCTTAA ATCGGAACCA CAATCAGCAT ATAAAGGTCC 120  
 TAATCCTGAC CTTAATCCCT TTGGAATATT GGTTTTATAA ATCATCAATC AACAGTGTTT 180  
 CACTATGAAA GCATATTCTG TCTTCTTCTT TTCATGTATT CCTTCACTGC TGGTGCTTAA 240  
 TGTCTTTCCT TCCTCTTCTG CCATTTCTCT TTCCATGAAT TATAATTGCC TTTTGAATTG 300  
 AGAAATTAAA ACCACTCCAC AGCTCGAG 328

## (2) INFORMATION FOR SEQ ID NO:751:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:751:

GAATTCGGCC TTCATGGCCT AATAAGGAAG AAATTGTCTC ACTTTATTGA ATAGTTGATT 60  
 TAAATTTTCT GGTATTTAGA GGTAATATAG TATAAGTTTT TTGTATATTT ATCTAAGATT 120  
 TTCCTTTTGA AAATTTTCTT CCCTTTTCAT ATTATTTTCA TTAAACGATT TTCCTTTAAA 180  
 ATTTGTTACT AACAAGAACT ATCTAATATG CAATGAGATT TTTGCAGGGC ATTCTCGAG 239

## (2) INFORMATION FOR SEQ ID NO:752:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 231 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:752:

```
GAATTCGGCC TTCATGGCCT AAGGAAAGTA CTTTAGACAA AAAAAAAAAA AAAAGTGAAA      60
TTAATTCCTG GGGCAATGAA AGGAAATGTC ATTGGCAGTT TTACCTTTAT TCTGCTAATG      120
GCTATTGTGT GTCTGTTTAC CTGGAGGCAC TTGGAAGTTG TGGCACAGAA TGCTGTATGT      180
ACAGGATATC ATCTACATGG GAATAATTGT TGTAACACCC CCAAACTCGA G                231
```

(2) INFORMATION FOR SEQ ID NO:753:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 308 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:753:

```
GAATTCGGCC TTCATGGCCT ACAATAGAGC TCTTAACTT ATTAACTGA AATTTTGTAT      60
CTTTTCACCA ACATTTCCCC AACTCCCCCTT TACCCCAACT ACTCCAGCCA CTGATAACCA      120
CCATTCTGTT CTCTATTTCT TTTTCTTTTT TTTTTTTTTT TTTTAAAGAG ATGGCGTCTT      180
GCTGTGTCGC CCAGGCTGAA GGGCAGTGGC ATGATCTCGG CTTACTGCAA CCTCTGCCTC      240
CCCGGTTTAA GCAATTCTCT ACCTCAGCCT CCCGAGTAGC TGGGATTACA AGCACCCATC      300
CACTCGAG                                     308
```

(2) INFORMATION FOR SEQ ID NO:754:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:754:

```
GAATTCTAGA CCTGCCTCGA GCCCTTTGTG GTTTTTAAGA AAAAAATTCT GTGCAGATCT      60
GTTCTCCTC CTGCTCCTTC CTTTCTCTCT ACATACAGTG CTCATTGGAG GCTCCCCACT      120
CGAG                                     124
```

(2) INFORMATION FOR SEQ ID NO:755:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 369 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:755:

GAATTCGGCC	TTCATGGCCT	AATCGGTGTC	TTTGGTAAAA	ATTCTATGAG	GATGACATAT	60
TCCATCATGT	TATTCGTTTC	ACATTTCCCT	TTGCTCAGTC	TCCAATGCAA	GCACAGCTTG	120
TGGTATAACC	TATTGTTTTC	CCATTCTAAT	AACCTTCTCA	TCGATCTTCG	TGTTCTTTTA	180
CTGAGGCAAA	TAACTGGCCA	CATACTGCAA	CCTAATGTGC	AGCAGCAACA	AAGGCAGCCA	240
CAAAGTAGCC	AACGTACATT	AACAGGAAGG	TTCTTCTTAA	GACAACTGTT	AACTCTGTTG	300
ATGCTGGCTT	TAAATTCTTC	AGGAGCTACT	TTTTCAGTTA	ATGAAGAAGG	GAATTCAGAT	360
TCAAATTTG						369

(2) INFORMATION FOR SEQ ID NO:756:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:756:

GAATTCGGCC	TTCATGGCCT	ACCGGCGAGG	AATAGGAATC	ATGGCGGCTG	CGCTGTTCGT	60
GCTGCTGGGA	TTGCGCTGTC	TGGGCACCCA	CGGAGCCTCC	GGGGCTGCCG	GCACAGTCTT	120
CACTACCGTA	GAAGACCTTG	GCTCCAAGAT	ACTCCTCACC	TGCTCCTTGA	ATGACAGCGC	180
CACAGAGGTC	ACAGGGCACC	GCTGGCTGAA	GGGGGGCGTG	GTGCTGAAGG	AGGATGCGCT	240
GCCCCGCCAG	AAAACGGAGT	TCAAGGTGGA	CTCGGACGAC	CAGTGGGGAG	AGTACTCCTG	300
CGTCTTCCTC	CCCGAGCCCA	TGGGCACGGC	CAACATCCAG	CTCCACGGGC	CTCCAGAGT	360
GAAGGCTGTG	AAGTCGTCAG	AACGCATCCT	CGAG			394

(2) INFORMATION FOR SEQ ID NO:757:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:757:

GAATTCGGCC	TTCATGGCCT	ACTGATGTTG	AAGACGACAC	CACGGCTTTG	ATGGAATATC	60
AGATATTGAA	AATGTCTCTC	TGCCTGTTCA	TCCTTCTGTT	TCTCACACCT	GGTATTTTAT	120
GCATTTGTCC	TCTCCAATGT	ATATGCACAG	AGAGGCACAG	GCATGTGGAC	TGTTCAGGCA	180
GAAACTTGTC	TACATTACCA	TCTGGACTGC	AAGAGAATAT	TATACATTTA	AACCTGTCTT	240
ATAACCACTT	TACTGATCTG	CATAACCAGT	TAACCCAATA	TACCAATCTG	AGGACCTTGG	300
ACATTTCAAA	CAACAGGCTT	GAAAGCCTGC	CTGCTCACTT	ACCTCGGTCT	CTGTGGAACA	360
TGTCTGCTGC	TAACAACAAC	ATTAACTTC	TTGACAAATC	TGATACTGCT	TATCAGTGGA	420
ATCTTAAATA	TCTGGATGTT	TCTAAGAACA	TGCTGGAAAA	GGTTGTCCTC	ATTAAAAATA	480
CACTAAGAAG	TCTCGAG					497

(2) INFORMATION FOR SEQ ID NO:758:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:758:

```

GAATTCGGCC TTCATGGCCT AACCAAATCA ACAACAACCT ATTTAGCTGT TCCCCAACCT    60
TTTCTCCGA  CCCCCTAACA ACCCCCCTCC TAATACTAAC TACCTGACTC CTACCCCTCA    120
CAATCATGGC AAGCCAACGC CACTTATCCA GTGAACCACT ATCACGAAAA AAATCTTACC    180
TCTCTATACT AATCTCCCTA CAAATCTCCT TAATTATAAC ATTCACAGCC ACAAACCTCG    240
AG                                                    242

```

(2) INFORMATION FOR SEQ ID NO:759:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 221 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:759:

```

GAATTCGGCC TTCATAGCCT ACCTAAATTA ATAATAATGT ATAGTTCAGA ATTGCTAAGA    60
GTACTTTTTT TTTTTTTTTT TNGAGACAGG TTCTCGCTCT GCCCTCCAGC CTGGTGACAG    120
AGCAAGATTG CATCTCAAAA AAGAAAAAAA ACACACAGCT AATAGAATTG CCATTGTTTT    180
TCATAATAGA ATCTAGCTGC TTA CTCAAC CTCACCTCGA G                                221

```

(2) INFORMATION FOR SEQ ID NO:760:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:760:

```

GAATTCGGCC TTCATGGCCT AAAATCAAAG ACTTTGCCAA TACCATTCTT GGCCATGGAG    60
GCATCATGGA TCGCTTTGAC TGCCAGTATC TGATGGCCAC CTTTGTCAAT GTATACATCG    120
CCAGTTTTAT CAGAGGCCCT AACCCAAGCA AACTGATTCA GCAGTTCCTG ACTTTACGGC    180
CAGATCAGCA GCTCCACATC TTCAACACGC TCGGTCTCA TCTGATCGAC AAAGGGATGC    240
TGACATCCAC CACAGAGGAC GAGTAGGGGC CACCCAGGGC CAGGAGAACA GGAACAGAAC    300
TGAGCAGGGG CAGGTCTCCA AGGCAAGCCC AGCTGGTGTG ACTTAGACAA TGACGAGGCT    360
TCAACTCACT GTCTTTTTTT TTTTTTTTTG GAGGGTATT TTTATTGTG GGTTCAAAAA    420
ATCTGTATAT ACAGTCTATG TGTTTAGAAT TTGTGTTGTA AGTAAACTAC AGCTTTGAGT    480
TGGAAGAAG TCACGGGTTG TAAACCAT TGGATTTTTT TAAACAAAA GTATTAATAA    540
TCTGGAAGAC TCGAG                                                    555

```

(2) INFORMATION FOR SEQ ID NO:761:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:761:

```

GGCCGATCAG GTTATTTTTT GAAAGTTTTA CTTACAGAGC ATATAAATTA CCCTTGGTTA      60
TTCTCAGCTG TGATTGAGTT CTGTGAAAGC ATAGTACCCT AGTACCCTGG GATATCTCTA      120
CATGTGAAAT TATTCAAATG TCTCCCTTAC TTTTTTTTTT TTTTITTTTG AGACAGGCTC      180
TGTTGCCCCAT GCTGCAGTGC AGTGGCACAA CTATGGCTCA TCTCAGCCTC GACCTCCTGG      240
GCTCAAGCGA TCCTCCCACC TCAGCCCCCC AGGCAGCTGG GACCACAGGC ACACACCACC      300
ATGTCCAGCC AATTCCTGTA TTTT                                     324

```

(2) INFORMATION FOR SEQ ID NO:762:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:762:

```

GAATTCGGCC TTCATGGCCT AGTGCCGGGG AGAAAGGGCT TCCTCCCCCA CACATCAGAC      60
AGGGCACCAA TGAGTGGGGC ACTCAAAAAA GAGAGCAGGC CCTGGAGAGG AAACCAAAGC      120
AAAGGTTAGT TTTATAATCT GATCCCTCAA TTACCTGTAA TTCATATTTT CTAAATGCAT      180
TAGCTCTAAT TCATTGTACT GCCCCAAAAA CAGAATAATA CTTTGAAACA TTAAATACAA      240
ACTACAATAA AAAAAATAAA ATTAGGCCTG GCGTGGTGGC TCATGCCTGT AATCCAGCA      300
CTTTGGAAGG CCGAGGCGGG TGGATCACTC GAG                                     333

```

(2) INFORMATION FOR SEQ ID NO:763:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:763:

```

GAATTCGGCC TTCATGGCCT AATTTGAATC AACACAACCA CCCACAGCCT AATTATTAGC      60
ATCATCCCTC TACTATTTTT TAACCAAATC AACACAACCC TATTTAGCTG TTCCCCAACC      120
TTTTCTCCG ACCCCCTAAC ACCCCCCTC CTAATACTAA CTACCTGACT CCTACCCCTC      180
ACAAATCATG CAAGCCAACG CCACTTATCC AGTGAACCAC TATCACGAAA AAAACTCTAC      240
CTCTCTATAC TAATCTCCCT ACAAATCTCC TTAATTATAA CATTCAACAC CACAGAACTC      300
GAG                                     303

```

(2) INFORMATION FOR SEQ ID NO:764:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:764:

GAATTCGGCC	TTCATGGCCT	AGGGATTAA	AGAGTTTTTC	TTGGGTGTTT	GTCAAACCTT	60
TATTTCCCTGT	CTGTGTGCAG	AGGGGATTCA	ACTTCAATTT	TTCTGCAGTG	GCTCTGGGTC	120
CAGCCCCCTTA	CTTAAAGATC	TGGAAAGCAT	GAAGACTGGG	CTTTTTTTCC	TATGTCTCTT	180
GGGAACTGCA	GCTGCAATCC	CGACAAATGC	AAGATTATTA	TCTGATCAAT	CCAAACCAAC	240
TGCTGAAACG	GTAGCACCTC	TCGAG				265

## (2) INFORMATION FOR SEQ ID NO:765:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:765:

GAATTCGGCC	TTCATGGCCT	ACCAACAGCA	AGCTCCAATA	TCACACATCC	AGACTCCTAT	60
GCTTTCCCAA	GAACAGGCAC	AACCCCCGCA	GCAGGGTTTA	TTTCAGCCTC	AGGTGGCCCT	120
GGGCTCCCTT	CCACCTAATC	CAATGCCTCA	AAGCCAACAA	GGAACCATGT	TCCAGTCACA	180
GCACTCAATA	GTTGCCATGC	AGAGTAACTC	TCCATCCCAG	GAACAGCAGC	AGCAGCAGCA	240
ACAGCAGCAG	CAACAGCAGC	AGCAACAACA	ACAGAGCATT	TTATTCAGTA	ATCAGAATAC	300
CATGGCTACA	ATGGCGTCTC	CAAAGCAACC	ACCACCAAAC	ATGATATTCA	ACCCAAATCA	360
AAATCCAATG	GCTAATCAGG	AGCAACAGAA	CCAGTCAATT	TTTCACCAAC	AAAGTAACAG	420
TCTCGAG						427

## (2) INFORMATION FOR SEQ ID NO:766:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:766:

CGATTGAATT	CTTGTCTGTT	CTGCCTCACT	CCCGAGCTCT	ACTGACTCCC	AACAGAGCGC	60
CCAAGAAGAA	AATGGCCATA	AGTGGAGTCC	CTGTGCTAGG	ATTTTTCATC	ATAGCTGTGC	120
TGATGAGCGC	TCAGGAATCA	TGGGCTATCA	AAGAAGAACA	TGTGATCATC	CAGGCCGAGT	180
TCTATCTGAA	TCCTGACCAA	TCAGGCGAGT	TTATGTTTGA	CTTTGATGGT	GATGAGATTT	240
TCCATGTGGA	TATGGCAAAG	AAGGAGGGTC	TCGAG			275

## (2) INFORMATION FOR SEQ ID NO:767:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:767:

GAATTCGGCC	TTCATGGCCT	ACGTAATTCT	GGAAAAGTGA	ATACTTGTGA	AGAGTCGTCT	60
TGAATGATTT	GTAATAAATC	CTGTTCTTAT	ATTCAACGAG	TTTCAATCT	TTGTCAGAGG	120

```

AGTATTACCA TTAGATTGAA AAAAAGGAAA ATAAATAATA AACACTTTTA AAAAAACTCC 180
CCATTCTCTT ATTCTCACTT TTAGGAAAAG AGACTGACTA ATATCTTCTG CCACAAATAC 240
CGATGTTCTT AAAAATATTT ATGGGACTGC TTTTGGCAAC CAGCCCTATT TTGTTTTCAT 300
ATCCCTTTTT GCTCCCATCT TTCCAAACTC ATAAACTCGA G 341

```

## (2) INFORMATION FOR SEQ ID NO:768:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:768:

```

GAATTCGGCC TTCATGGCCT ACAGAAAGAG TTTGAGACCT GAATAGCTCC CAGATTTCAG 60
TCTTTTCCTG TTTTGTGTTA CTTTGGGTTA AAAAAAAAAA AAGTCTGATT GGTTTAAATT 120
GAAGGAAAGA TTTGTACTAC AGTTCTTTTG TTGTAAAGAG TTGTGTTGTT CTTTTCCCCC 180
AAAGTGGTTT CAGCAATATT TAAGGAGATG TAAGAGCTTT ACAAAAAGAC ACTTGATACT 240
TGTTTTCAAA CAGTATACA AGATAAGCTT CCAGGCTCGA G 281

```

## (2) INFORMATION FOR SEQ ID NO:769:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:769:

```

GAATTCGGCC TTCATGGCCT ACTAACGAGG AAAGGGATTT AAAGAGTTTT TCTTGGGTGT 60
TTGTCAAACCT TTTATTCCCT GTCTGTGTGC AGAGGGGATT CAACTTCAAT TTTTCTGCAG 120
TGGCTCTGGG TCCAGCCCCT TACTTAAAGA TCTGAAAGC ATGAAGACTG GGCTTTTTTT 180
CCTATGTCTC TTGGGAACTG CAGCTGCAAT CCCGACAAAT GCAAGATTAT TATCTGATCA 240
TTCCAAACCA ACTGCTGAAA CGGTAGCACC TGACAACACT GCAATCCCCA GTTTAAGGGC 300
TGAAGCTGAA GAAATGAAA AAGAAACAGC AGTATCCACA GAGAGACTCG AG 352

```

## (2) INFORMATION FOR SEQ ID NO:770:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:770:

```

GAGCGTGGTG GATATAAAAC AGGTAAGAGA CTTTCATGGT ATACCTTTAT ATTGTTGGAT 60
TAAAGGCACT GCCAACTCAA AAAACTTAAC CGAAAATTTT TTTTAATCAG TTAAATATTT 120
ACTGATATGA AAATGACATG AAATAAATT TTTGTGTTTT ACTTAAAGGG TGCTCTGTTT 180
GAAACTTCCT CAGACAACTG AATGGGAGAA CCAGATGAAT TTAGTAAAAG TATTAACGTC 240
AAATATTTAT ACTGCTTTTT TTTGTTTGTT TGTTTTTGAG ACAGAATCTT GCTCTGTTGC 300

```

CCAGGCTGGT CTCGAG

316

## (2) INFORMATION FOR SEQ ID NO:771:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:771:

```

GAATTCGGCC TTCATGGCCT ACTTTGATGG AATATCAGAT ATTGAAAATG TCTCTTGCC      60
TGTTTCATCCT TCTGTTTCTC ACACCTGGTA TTTTATGCAT TTGTCCTCTC CAATGTATAT      120
GCACAGAGAG GCACAGGCAT GTGGACTGTT CAGGCAGAAA CTTGTCTACA TTACCATCTG      180
GACTGCAAGA GAATATTATA CATTAAACC TGTCTTATAA CCACCTTACT GATCTGCATA      240
ACCAAGTTAAC CCAATATACC AATCTGAGGA CCCTGGACAT TTCAAACAAC AGGCTTGAAA      300
GCCTGCCTGC TCACTTACCT CGGTCTCTGT GGAACATGTC TGCTGCTAAC AACAAACATTA      360
AACTTCTTGA CAAATCTGAT ACTGCTTATC AGTGGAATCT TAAATATCTG GATGTTTCTA      420
AGAACATGCT GGAAAAGGTT GTCCTCATTA AAAATACACT AAGAAGTCTC GAG              473

```

## (2) INFORMATION FOR SEQ ID NO:772:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:772:

```

ATACAGTAAT CAAAGTAAGT AATATTTCAA TCCAATATTT TTAAAAATCA GAATTAATGC      60
AAAAAAAACC ATGATGAACA AAATATTAAA ATTTAAAATA AAGACAGGAT TAGTATTACT      120
GAGTTTTCCT TTTGTCCCAG GCTCTAATAT GGCTTGGCAT GGGGCAGAAC ATTACAACAT      180
ACCAAGTCGTG TCATGGTGCC CAAGGCTCCA CAGACCTCAG TGGCTCCCTG CTGCCTGCCA      240
CAGCAATCTC GAG              253

```

## (2) INFORMATION FOR SEQ ID NO:773:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:773:

```

GAATTCGGCC TTCATGGCCT AGTGAGAATT GACTGTTGCT TTTGTTTGCC TGCTTACTGT      60
TTTCTTTTAT TTATTTGTTT TTGGACCTGT GGCACAAAGG ATCTGTTTAC TGACCATCCT      120
TATTGTGAGG CACACAGTCA CCATGGCACC CTGCGCGTTA CTCCTGTTCC ACTTGTTTAT      180
TCTCTGTATC CCCATACTAG TTATTATCGA AACCATCAGC CTACTCATTC AACCAATAGC      240
CCTGGCCGTA CGCCTAACCG CTAACATTAC TACAGGCCAC CTCGAG              286

```



## (2) INFORMATION FOR SEQ ID NO:774:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:774:

```

GAGGCTGACA AAATACTCAC CTTTACCTTT ATTTTTCAT TTTATACTCA CAACCATATT      60
TTTTTTGGCC CCCTTCCCTT TATTTTAACT CATAACTGAT ACTTAAAGGT GCTCTGCCTT      120
ATTAAATCAG CTCCTAGGCT GCAAGTGCAT AATATTTAAA AATTTGCAAC TTTGACTTTT      180
TAAAAATCTG GTCTTGGTAT GGAGCAACTT TGCCTTTTTT TTTTTTTTTT TTGAGACAGA      240
GTCTCGCTTT NTCGCCCAGG CTGGAGTGCA GTGGTCCCAT CTCAGCTCAC TGCAACCTCC      300
TCCTCCCGGG TTCAAGAGAT TCTCCTGCCT CAGCCTCCCG AGTAGCTGGG ATTACAGGTG      360
CCTGCCCCAA CACCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:775:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:775:

```

GGCCTGGTAG GATAAGAATA TAACTTCAG GGTGACCGAA AAATCAGAAT AGGTGTTGGT      60
ATAGAATGGG GTCTCCTCCT CCGGCGGGGT CGAAGAAGGT GGTGTTGAGG TTGCGGTCTG      120
TTAGTAGTAT AGTGATGCCA GCAGCTAGGA CTGGGAGAGA TAGGAGAAGT AGGACTGCTG      180
TGATTAGGAC GGATCAGACG AAGAGGGGCG TTTGGTATTG GGTATGGCA GGGGGTTTTA      240
TATTGATAAT TGTGTGATG AAATTGATGG CCCCTAAGAT AGAGGAGACA CCTGCTAGGT      300
GTAAGGAGAA GATGGTTAGG TCTACGGAGG CTCCAGGGAA GCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:776:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:776:

```

GAATTCGGCC TTCATGGCCT AAGAGGATAA GGGAAGAAAA AGAAGAAAGT ATTCCATTCC      60
CACATCCCTT TAGGTTGGCT TCTTATTTTA TGTTTTGTTT GGTGTGTTTA TTTTGCTTTG      120
TTAACATTTT CAACTAGCTA TAGAAACGTT TGCAATTCTT ATTACTGATT AGCATTCCAA      180
AACTTTGTAA TGAACATTTT TCTCTCTTTC TTTTTTTTTT TTTTITNGAG ACAGGGTCTC      240
GCTCTGTCAC CAAGCTGGAG TGCAGTGAGC CAAGATCCTA CTGCTGTCCA TTCCAGCCTG      300
GGTGACAGAA CAAGACCTTG TCCGCCACC TTCCACCCCC CCCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:777:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 377 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:777:

```
GAATTCGGCC TTCATGGCCT ACATGTTTAT TGAGCATTTA CTGTTTACCC ATCAGTATTC      60
TTGATGCTAA GGATATAGCA GTGAACAAAA CAATCCTTGT GGACTTACAT CATAGTAGGG      120
AAAATAGACA ATAAATAAAT GTATGATAAG TCAGTTGATA ATAAGTGCTA CGAAGTAAAA      180
CAAAGCAGGA ATAAAGTTGG GGAGAAAAGT GGAGGGTGAT TGCTATTTC A GTTGAGATCA      240
TTGGGATGGT CTTTTCTGAG GAGGGGACAT TTGCATAGAG AAGCAAGGAT GTGAGTTATG      300
TGTCTGCTGT GTGTAGAACA TTCTGGGAAA GGGCAGAGAA GGAACAAGA CTATTCCAGA      360
AAAAGAGGGC ACTCGAG                                     377
```

(2) INFORMATION FOR SEQ ID NO:778:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 304 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:778:

```
GAATTCGGCC TTCATGGCCT AGCACAGCTA GACGGTTCCA GCTCAGGGTC TCTCATGAAG      60
TTGCAATCAA AATATTGGCA GGAGAGAAAA ACATATTTTC AGAAGCTGCA GGCATAGGAA      120
GACTTGGCTG GGGTTGAAGG ATCCACTTCC AAGATGGCGC ACTCAGTGGC TCTTGGCTGG      180
AGGCCTCAGT TCCCTGCTGC GTGGAGCTCT CCCTCCAGCT GCTTGAGTGG ACTCATGACA      240
TGCAGCTGGC CTCCCCTGGA GCAGTCGATC CAACAATGAG CATGGCCATG AACTAGAGCT      300
CGAG                                     304
```

(2) INFORMATION FOR SEQ ID NO:779:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 316 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:779:

```
GAATTCGGCC TTCATGGCCT AGCCAAAACC ACAGAATATA TAATATAGAT CTTGGGGATA      60
CAGCAGAGAA AAAAGACAAA AATCCCTGTT ACAATCCGTT CTAGAATTGA TGTTCCTTTG      120
TTGGTTAATT CAAGTTTTGA TTTCAGAAAT CTTACCTCTT GGTGACTGCC TAGAGTGGCA      180
TTGGGCTGGA GGGGAGGAAC TGTTCATGTT GGAAATGGGG AATGGGCCAA AAATGCAATT      240
GAGTAGGTTG ATTAAGTTGT CTGCTGTCAG AGTGAAGCA GGGGTAGTTT CCCTTTCCGA      300
CCAGAGGCAT CTCGAG                                     316
```

(2) INFORMATION FOR SEQ ID NO:780:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:780:

```
GAATTCGGCC TTCATGGCCT ACAGAAGATT TGGACAATTC CATTGATAAA ACAGAAGCTG      60
GAATTAAGGA GCTTCAGAAAG AGTATGGAGC GCTGGAAAAA TATGGAAAAA GAACATATGG      120
ATGCTATAAA TCATGATACT AAAGAACTGG AAAAGATGAC AAATCGGCAA GGCATGCTAT      180
TNAAGAAGAA AGAAGAGTGT ATGAAGAAAA TTCGAGAACT TGGATCACTT CCCAGGAAG      240
CATTTGAAAA GCACCAGGCT CGAG                                         264
```

(2) INFORMATION FOR SEQ ID NO:781:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:781:

```
GAATTCGGCC AAAGAGGCCT AGCGATTGGG TCTTTGATAT CTGTAAGCCG TTGAATTAGC      60
CCTGCCCTCT GTTCTTAGTT TAGGAGACCA TAGATGTGCC CTTATTATTG AAAGTGAATTT      120
TATTCAGTTA CTGAAGTTAT CTTACCTGAT ACATAATTTT ACCCATAGAA AATAATATGA      180
AAATAGCAAA ATCACTCAGG TAAGATAGAT GAGTGCCTGC TGTGTTCAAG AGACTGTTAA      240
TATGAGGCTC TGGGGCTGCA AAAAATCAAG TTGCTAAGAA ATATGAGGTC AGAGCAGCAG      300
AAGTTCTGAG TAACCACTGA TTACTGACT TGGGGTGATC AGAAGTGACT GTGTGGGAGA      360
GGTGAAATTG AGCAGACTCT GAAGGAACCT CTGGGTTTTG GTAAATAGGG AGCTGGGGAT      420
GAGGATGCC CAGGTTTTAG AAAGAACACA GGCTGTTGAA TCACACCTGG GTTCAAACCC      480
TGGCTTGCTA CTCCCTAGTT TGTGACCTTG TCAAATTCCT TGATTCTTTT TTTCTTTTTC      540
TTTTTTTAAT TTTGGAGACA ACAGTCTCGC TCTGTCACCC                                         580
```

(2) INFORMATION FOR SEQ ID NO:782:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 131 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:782:

```
GAATTCGGCC AAAGAGGCCT AGAATGGTAG AGTAAAAAGA ACCCTCTGCT GAGTAACCAA      60
GCCTTTAATT TCCTGTTCTT GCTGTAGGGC TTTCACAAAT GCATTTTTC GCGGTTGGT      120
GTGTCCTCGA G                                         131
```

(2) INFORMATION FOR SEQ ID NO:783:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:783:

```
GAATTCGGCC AAAGAGGCCT AGATTGAGGT TGTGGTAGAT TAGGCGTAGG TAGAAGTAGA      60
GGTTAAGGAG GGTGATGGTG GCTATGATGG TGC GGCTCGA GGCAGGTCTA GAATTCATC      120
G                                          121
```

(2) INFORMATION FOR SEQ ID NO:784:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 405 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:784:

```
GAATTCGGCC AAAGAGGCCT AAGCAAGATG AAGCCCAACA TCATCTTTGT ACTTTCCCTG      60
CTCCTCATCT TGGAGAAGCA AGCAGCTGTG ATGGGACAAA AAGGTGGATC AAAAGGCCGA      120
TTACCAAGTG AATTTTCCCA ATTCCACAC GGACAAAAGG GCCAGCACTA TTCTGGACAA      180
AAAGGCAAGC AACAACTGA ATCCAAAGGC AGTTTTTCTA TTCAATACAC ATATCATGTA      240
GATGCCAATG ATCATGACCA GACCCGAAAA AGTCAGCAAT ATGATTTGAA TGCCCTACAT      300
AAGACGACAA AATCACAACG ACATCTAGGT GGAAGTCAAC AACTGCTCCA TAATAAACAA      360
GAAGGCAGAG ACCATGATAA ATCAAAGGT CATTTTCACA GGGA      405
```

(2) INFORMATION FOR SEQ ID NO:785:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 642 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:785:

```
GAATTCGGCC AAAGAGGCCT ACTACTCACC TCTTGCTCTC TCCCAACCAT AGAAACAGCC      60
ACGACTCCTA CCACAACTT GGGAAACACC ACCACTGAGA CCACCTCCA CAGTACTCCC      120
AGCTTCACTT CTTAGCCAT CTAATCCACC GTCAACATAT CCACAACTAC CATCTCCTCA      180
TTTCCCCCTT CCTCAGGTAC CATGGTGACA TTCACAACCA TGAACCCATC CTCTCTGAGT      240
ACAGACATAT CTACCACCAC ACTGAAAAAT ATCACCAGC CTTCTGTGGG CTCTACTGGT      300
TTCCTGACTG CAGCTACAGA CCTCACCTCA ACATTCCTG TTTCCACTTC CTCAGCAATG      360
TCCACAAGTG TCACTCCATC TGCCCCCAGC ATCCAGAATA AAGAAATCTC AACACTTGTG      420
AGTACAACCA CTACCACCAG TCCCACTGAG AGAATGACTC TCACAAGTAC AGAGAATACC      480
CCGACAAGTT ACATCCTGAC CACCACTCCA GTGACATATT CATTTTCCCC TTCCATGTCT      540
GCCAGCAGTG ACTGGACCAC TGACACAGAG AGCATCTCCT CAGCTCCAGC CATCACCAGT      600
ACACTCCACA CAACAGCTGA ATCCACCCTG GCAGGTCTAG AA      642
```

(2) INFORMATION FOR SEQ ID NO:786:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 469 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:786:

```
GAATTCGGCC AAAGAGGCCT ATGGCCTTGG AAGGGATGAG CAAACGGAAG AGAAAGAGAA    60
GTGTCCAGGA GGGAGAGAAT CCTGACGACG GCGTTCGCGG GAGTCCGCCG GAAGACTACA    120
GGCTTGGACA GGTCCGCACT AGCTTATTTC GCGGCGAACA CCATTCCAGA GGTGGCACCG    180
GTCGGCTGGC GTCCCTCTTC AGTTCTCTGG AGCCCCAGAT TCAACCCGTG TACGTGCCTG    240
TGCCTAAACA AACCATCAAA AAAACGAAAC GGAATGAGGA GGAAGAAAGT ACATCCCAGA    300
TTGAAAGACC ACTTTCGCAA GAACCTGCCA AAAAAGTGAA AGCGAAGAAG AAACACACTA    360
ACGCAGAAAA AAAGTTGGCA GACAGGGAAA GCGCTCTAGC GAGTGCTGAT TTAGAAGAAG    420
AAATTCACCA GAAACAAGGG CTTAGCTCGA GCAGGTCTAG AATTCAATG    469
```

(2) INFORMATION FOR SEQ ID NO:787:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 501 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:787:

```
GAATTCGGCC AAAGAGGCCT AAGAAAAGAT ATAAATCAGA GAAAAAGCAT GAAGCGTATC    60
ATATTGATTT TAACAGTATT GCTTGCCATG TTAGGGCAGG TTGCCTATGC GCAGAAAACG    120
TGTGTTCATCG CATCGGCAGA AAATCATGTG CCTATTCTGT AAGCACTTAT TCATACCAAT    180
AACAATCATT GGGCAAGAAC AGATTATCGG GGCTATTGGA CGATGCGCTA TCAGTTTGAT    240
TCAGCAACCG TATCGAAACC TGGTTTATG AAGGCAACTA TCCGGTACAA GGAAC TGCCG    300
GATACTCTGT TTCTCTTGCC GGATGCCAAA CAGTTAGGCG AAGTGACAGT TTGGGGCAAG    360
AATCAGGAAG GCATCAAAAA TATGGAAGAG GATATTCAGG AGAAGATAAA CTCTTTGCCA    420
ACTTCATCTG CTGGCATTGG TTTTGATGCT TTCGGATGGA TGGATAAACA GGGAAAACGT    480
GATAAGAAGC ATCTGCAACA G    501
```

(2) INFORMATION FOR SEQ ID NO:788:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 122 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:788:

```
TGATGATCGA TATCCAGAAA GACACTGCGG TGGAAGGTGA GGAGATTGAA GTCAACTGCA    60
CTGCTATGGC CAGCAAGCCA GCCACGACTA TCAGGTGGTT CAAAGGGAAC GCAGAACTCG    120
AG    122
```

(2) INFORMATION FOR SEQ ID NO:789:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 274 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:789:

```
GGTGAGCTGA GATCGCACCA CTGCACTGCA AGACCCTGTC TCAAAACAAA CAAACAAACA      60
ACAACAACAA CAACAAACCA AACCAAACAA AAAACCTGCA TAGCCAACTA GACCAGCATA      120
GAGGGCGAAA ACCATGCTTT TTGTCAAATG GTACTGTTTA TTCTGTTTTG CTGTCAGCTG      180
GTTTGCCGCT TCTGATAAAG CTAGCCCTTG CTGTGTGCAT GCAGGTTATA GTGCCAGGC      240
TCATATTTCC TCTTCTTGCT GCACCTCACT CGAG                                274
```

(2) INFORMATION FOR SEQ ID NO:790:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 209 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:790:

```
GAATTCGGCC TTCATGGCCT AGGGAAAGGA GGCGGCAGCC AGGCTGTGTC CCCTGACCGT      60
TGGAGCGTCT GCGACCCCGG CATCCCGCA CCCTCAAGGC ACCTCAAAG ATGATGATGG      120
GTTGTGGGGA GTCAGAGCTG AAGTCGCGCG ACGGGGAAGA AGCCGCGGCG GTCCCGGGGC      180
CACCCCGGA GCCCAAGTC CCGCAACCG                                209
```

(2) INFORMATION FOR SEQ ID NO:791:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 389 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:791:

```
GAGAGAATTA AAGAGAACCA CNAAGCTGAA CCTCAAAAAG TTAGCCTGGC GAGGGGAGGA      60
TGATGAGATT TCCCCTGTTG TCACATAAAC AAGGAAGTAA AGGGGGCCCC TTGTGCTCTC      120
AGAACTCCAA GCATGAAACG ATAGCAAAGG GAAAAACAGC TAAGTGTTTC CTGGCTGAAT      180
TTTATTTTGC TTTCAGTTTC TGCCATTTC A GTTCCTGTTA TCGTGCTTTG AGGTGCACTG      240
AACTGCAGCA AATCCAGGGG ATCCAAGGCT ACGTTGAAAA GCCTTTGACC ACAGTGCAAGG      300
GAGCAGAAGA CATTAAATGAC GTGATGTCGA CACAGCCCGC ACTCAGGATC CTCCAGGAAA      360
AGAACACAGA GATAACCCCG GAACTCGAG                                389
```

(2) INFORMATION FOR SEQ ID NO:792:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 332 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:792:

```

GTGCTTTGGA TTTTGCATCC AGCTTTTCT CAACACCCCC GCTGGAAGTC AGCGGCTCCA      60
TCTCTTCGCC TTCGGAAGCA CCTGCGTCTC TGTCTCTGAT GCCGAGTGAC TTGTCCCCCT      120
TCACATCTCA GTCTTTTCT CCCTTGGTTG AGACATTTAC ATTGTTTGAC TCTAGTGATC      180
TGCAGTCATC TCAGCTGTCT CTTCCCAAGT CCACAAATCT TGAGTTTTTCG CAGCTCCAGC      240
CAAGTTCCGA GCTGCCTTTA AACACCATCA TGTGCTACC TACCCTTCT GAGGTGTCAC      300
CATGGTCAAG CTTCCCTTCT GATTCTCTCG AG                                     332

```

(2) INFORMATION FOR SEQ ID NO:793:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:793:

```

GAATTCGGCC TTCATGGCCT ACTGGAATTT CTTTCTTGCC CTTTCATATT TTAAGATGGC      60
TGGAATAGCA CAGGGAGTAT ATAGCAGATA TCTTCTGGGA AATAATTCAT CTGAGGATAG      120
CTTTTTATTT GCCAATATTG TGCAACCTCT GGCAGAACT GGACTACAAC TCTCCAAACG      180
AACTTTCAGT ACTGTACTAC CACAGATTGA TACTACTGGA CAGTTGTTTG TACAGACTCG      240
GAAAGGTCAG GAAGTTCTCG AG                                     262

```

(2) INFORMATION FOR SEQ ID NO:794:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:794:

```

GAATTCGGCC TTCATGGCCT ACTATGCCGT CATGATAGAG AAGATGATCC TGAGAGACCT      60
GTGCCGTTTC ATGTTTGTCT ACGTCGTCTT CTGTTCGGG TTTTCCACAG CGGTGGTGAC      120
GCTGATTGAA GACGGGAAGA ATGACTCCCT GCCGTCTGAG TCCACGTCGC ACAGGTGGCG      180
GGGGCCTGCC TGCAGGCCCC CCGATAGCTC CTACAACAGC CTGTACTCCA CCTGCCTGGA      240
GCTGTTCAAG TTCACCATCG GCATGGGCGA CCTGGAGTTC ACTGAGAACC ATGAACCTCT      300
CGAG                                     304

```

(2) INFORMATION FOR SEQ ID NO:795:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:795:

```

GCGATTGAAT TCTAGACCTG CCTCCAAGCA GCTGCAGTAT CTCGGAAGAA AAAACGAAGA      60
ATGGGAACCT ATAGCCTGGT TCCTAAGAAA AAGACCAAAG TATTAAAACA GAGGACGGTG      120
ATTGAGATGT TTAAGAGCAT AACTCATTCC ACTGTGGGT CCAAGGGGGA GAAGGACCTG      180
GGCGCCAGCA GCCTGCACGT GAATGGGGAG AGCCTGGAGA TGGACTCAGA TGAGGACGAC      240
TCAGAGGAGC TCGAG                                     255

```

## (2) INFORMATION FOR SEQ ID NO:796:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:796:

```

CTAGTCTTCC AACCCTTCTG GACTTTCTTT GCTCTTGCT TGTTTTGGGT GTACTGGATC      60
ATGACACTTC TTTTCTTGG CACTACCGGC AGTCCTGTTC AGAATGAGCA AGGCTTTGTG      120
GAGTTCAAAA TTTCTGGGCC TCTGCAGTAC ATGTGGTGGT ACCATGTGGT GGGCCTGATT      180
TGGATCAGTG AATTTATTCT AGCATGTCAG CAGATGACAG TGGCAGGAGC TGTGGTAACA      240
TACTATTTTA CTAGGGAAGT ACTCGAG                                     267

```

## (2) INFORMATION FOR SEQ ID NO:797:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 185 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:797:

```

GAATTCGGCC TTCATGGCCT AGGGGGAGTT TAGCTGAAAC AAGTTTACA GAAGCAGAGC      60
TGGCAAATAG TTAAATATT AATTGGTAC AATAGCAGTT ACAAACAAA TAAACAGTTC      120
CAGGTGCAGG GGCTTAACT ATCACAAAGA GAGAAATGCA GGGGTTTGC GTGACATTCA      180
CCGAG                                     185

```

## (2) INFORMATION FOR SEQ ID NO:798:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:798:

```

GGGCGTGTGA CGACTGCTGG GAGAGGAAAG CGAGACATCA TTCCAACCCT CCAGAAGCTA      60
AAGATCCTGG AACTCAAGGG GAAACTAAC GTAAGTGCGA AAGCGAACAA GCAAACATGT      120
CCTCAACGGG GCAGGCAGGC TGTCGGGGTA CAGAGCTGGG ATCTGGGAAG GAACAGAGAG      180
GGCCGCTCAG GGAGAGGAAG CACAGTGCCA CCGAGGCAC GCACTCAGCA GGCCTCGCA      240
GGCTGGGCAG AGGTAGAGAA GCAGCGCTGC ACAGGCAGGC AGCTGACCCA GGGCTCTTAG      300

```



AGCCGGGCAG GAGAGCTGGT GTGGGACCTG GGAGGAGGAC AGGAGCCTTC AAAGCAGCAC	360
CGCCTGATTG CAGCCAGGAG GGTAGCATCA AGGAAGATGG AACTGCGGCC AGGCCACATC	420
CAGGGGTGCT CGAG	434

## (2) INFORMATION FOR SEQ ID NO:799:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:799:

GAAAAGTCGG ATGCTGGCCT CTGGAAATCA GCCAGATCAA GATATTACAC ATTTCTTCCA	60
ACAGATCCAG GAGCTCAATT TGGAAATGGA AGACCAACAG GAGAACCTAG ATACTCTTGA	120
GCACCTGGTC ACTGAACTGA GCTCTTGTGG CTTTGCCTG GACTTGTGCC AGCATCAGGA	180
CAGGGTACAG AATCTAAGAA AAGACTTCAC AGAGCTACAG AAGACAGTTA AAGAGAGAGA	240
GAAAGATGCA TCATCTTGCC AGGAACAGTT GGATGAATTC CGGAAGCTGG TCAGGACCTT	300
CCAGAAATGG TTGAAAGAAA CTGAAGGGAG TATTCCACCT ACGGAACTT CTATGAGTGC	360
TAAAGAGTTA GAAAAGCAGA TTGAACACCT GAAGAGTCTA CTAGATGACT GGGCAAGTCT	420
CGAG	424

## (2) INFORMATION FOR SEQ ID NO:800:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:800:

GAATTCGGCC TTCATGGCCT AGGGGTGCTG TGTGTTTTTC AGGGCGCCCT GCGTCCGGCA	60
GAGGAGGCGA GCATCCCGCT CAGGTGATGA GGAACCCCTC GCGCACCCAG CGCAGAAGGC	120
TGCTGCCGCC GGACGCCTCC ATTGTTTGAC CACAACAAGG GCCGGATTCT CACCCAGCAG	180
GATCCTAAGG CCTTTGTAGT CCTTCAGCCA CTGTGGGCCC TGCCTCTGCC TGTTCCTCTG	240
GAATGTCTTG GGGGTTTTGA TCCTGTCACT GTGACCTGCA AATCCAAGAG ACAACTCGAG	300

## (2) INFORMATION FOR SEQ ID NO:801:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:801:

GAGAAATCAG TGAAGGATTT GCAACGCTGC ACCGTTTCTC TAACTAGATA TCGCGTCATG	60
ATTAAGGAAG AAGTGGATAG TTCCGTGAAG AAGATCAAAG CTGCCTTTGC TGAATTACAC	120
AACTGCATCA TTGACAAAGA AGTTTCATTA ATGGCAGAAA TGGATAAAGT TAAAGAAGAA	180
GCCATGGAAG TCCTGACTGC TCGTCAGAAG AAAGCAGAAG AACTAAAGAG ACTCACTGAC	240

CTTGCCAGTC AGATGGCAGA GATGCAGCTG GCCGAACTCA GGGCAGAAAT TAAGCACGGT 300  
CTCGAG 306

## (2) INFORMATION FOR SEQ ID NO:802:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 263 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:802:

GCTCGCGGCC GTTCAGAATT ATAAGGCTGT CTGCAGAGAT TTGAAAAATG GCAACAAATG 60  
 AAAGTGTGAG CATCTTTAGT TCAGCATCCT TGGCTGTGGA ATATGTAGAT TCACTTTTAC 120  
 CTGAGAATCC TCTGCAAGAA CCATTAAAA ATGCTTGGAA CTATATGTTG AATAATTATA 180  
 CAAAGTTCCA GATTGCAACA TGGGGATCCC TTATAGTTCA TGAAGCCCTT TATTTCTTAT 240  
 TCTGTTTACC TGGATGTCTC GAG 263

## (2) INFORMATION FOR SEQ ID NO:803:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 276 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:803:

GAATTCGGCC TTCATGGCCT AAATAGTTAG TCACCTTCTG ACCTTCTCCT CTTTCTCAAA 60  
 GCCTTCTGTC CCTGGTTTTT GCAAGTGCTG CATTTCCGCC GAGAATCCGC GTTGCCTACT 120  
 GCTGCCACCT CCTGTTTATT TAGAACTATG CAAAGACTCC GCTTCCGTTT TCCTGAGCTC 180  
 CTCGGGCCCC AGAGTCTCTG TTTGATTATT TATTTATTTA TTTATTTATT TGCCAAAAAT 240  
 TCTCCTCTTC AACTTATAGA ATGCACCCAA CTCGAG 276

## (2) INFORMATION FOR SEQ ID NO:804:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 580 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:804:

GAATTCGGCC TTCATGCCTA CAGCCATATT AAAACTAAGT AAACCTCGTCC CTGGGAACCTA 60  
 CACTTTCAGC TTGACTGTAG TAGACTCTGA TGGAGCTACC AACTCTACTA CTGCAACCTT 120  
 GACAGTGAAC AAAGCTGTGG ATTACCCCCC TGTGGCCAAC GCAGGCCCCA ACCAAGTGAT 180  
 CACCCTGCCC CAAAACCTCA TCACCCTCTT TGGGAACCAG AGCACTGATG ATCATGGCAT 240  
 CACCAGCTAT GAGTGGTCAC TCAGCCCAAG CAGCAAAGGG AAAGTGGTGG AGATGCAGGG 300  
 TGTTAGAACA CCAACCTTAC AGCTCTCTGC GATGCAAGAA GGAGACTACA CTTACCAGCT 360  
 CACAGTGACT GACACAATAG GACAGCAGGC CACTGCTCAA GTGACTGTTA TTGTGCAACC 420  
 TGAAAACAAT AAGCCTCCTC AGGCAGATGC AGGCCAGAT AAAGAGCTGA CCCTTCCTGT 480

GGATAGCACA ACCCTGGATG GCAGCAAGAG CTCAGATGAT CAGAAAATTA TCTCATATCT 540  
CTGGGAAAAA ACACAGGGAC CTGATGGGGT GCAGCTCGAG 580

## (2) INFORMATION FOR SEQ ID NO:805:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:805:

CAAATTGATT TCGGCACAGT TCTGGGAGCT GGGACATTCA AGGTCACCAC GTTGCCACCT 60  
GTGAAGGCCT TCTGCTGCAT CCTCATGTTG GGGAAGATCA GAAGTGAGAA CACATGCTGG 120  
CCAGTCCTTT CACAGCAGCA TCAATCCGTG CATGGGGCAG GGCCCTCGGC CTGAGCGCCT 180  
CCCCCAGGCC CTAAC TCCCA GCACTGCCCT GCTGGGGATG GAATTTCCAA CATGAATCTG 240  
GGGGATGCTT TCGGACCACA GCCGGGGAGC CTGCCCTGGC TTCCAGCTGC TGGTGGCCCA 300  
GGGGTCCCT GGCTTGCCTC GAG 323

## (2) INFORMATION FOR SEQ ID NO:806:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:806:

GCGATTGAAT TCTAGACCTG CCATTCTCGC TCTGCCGACG TTGACTCTCT CTCTGAATCC 60  
AGTCCCAACT CCAGCCCTGG CCCCTGTCCT GAGAAGGCCC CACCACCCCA GAAGCCCAGC 120  
CATCTCCCAG GGGGCCCTCA TCGCCATCGT CTGCAACGGT CTCGTGGGCT TCTTGCTGCT 180  
GCTGCTCTGG GTCATCCTCT GCTGGGCCTG CCATTCTCGC TCTGCCGACG TTGACTCTCT 240  
CTCTGAATCC AGTCCCAACT CCAGCCCTGG CCCCTGTCCT GAGAAGGCCC CACCACCACT 300  
CGAG 304

## (2) INFORMATION FOR SEQ ID NO:807:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:807:

GAATTCGGCC TTCATGGCCT AGATATGAGA AATGAGTGTT GGACGTCGAA GAATAAAGTT 60  
GTTGGGTATC CTGATGATGG CAAATGTCTT CATTATTTT ATTATGGAAG TCTCCAAAG 120  
CAGTAGCCAA GAAAAAATG GAAAAGGGGA AGTAATAATA CCCAAAGAGA AGTTCTGGAA 180  
GATATCTACC CCTCCCGAGG CATACTGGAA CCGAGAGCAA GAGAAGCTGA ACCGGCAGTA 240  
CAACCCATC CTGAGCATGC TGACCAACCA GACGGGGGAG GCGGGCAGGC TCTCCAATAT 300  
AAGCCATCTG AACTACTGCG AACCTGACCT GAGGGTCACG TCGGTGGTTA CGGGTTTAA 360

```

CAACTTGCCG GACAGATTTA AAGACTTTCT GCTGTATTTG AGATGCCGCA ATTATTCAGT 420
GCTTATAGAT CAGCCGGATA AGTGTGCAA GAAACCTTTC TTGTTGCTGG CGATTAAAGTC 480
CCTCACTCCA CATTTTGCCA GAAGGCAAGC AATCCGGGAA TCCTGGGGCC AAGAAAGCAA 540
CGCAGGGAAC CTCGAG 556

```

## (2) INFORMATION FOR SEQ ID NO:808:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:808:

```

GGAAACTTCT AAACATTTTT GCTCGCAACT TTTACAACAT GAGAATGTGA GCCTTATTTG 60
TCGCATTTGC TATCAATTTC ATCTTGCTCT TTTATAAGGT CTCCACTTCT TCTGTGGTTG 120
AAGGAAAGGA GCTCCCCACG AGAAGTTCAA GTGAAAATGC CAAAGTGACA AGCCTGGACA 180
GCAGCTCCCA TAGAATCATC GCAGTTCACT ATGTACTAGA GGAGAGCAGC GGCTACATGG 240
AGCCCACGTT GCGTATCTTA GCTATTCTGC ACACGGTCAT TTCTTTCTTC TGCATCATTG 300
GATACTACTG CTTGAAAGTC CCATTGGTTA TTTTAAAGCG AGAAAAGGAA GTGCTCGAG 359

```

## (2) INFORMATION FOR SEQ ID NO:809:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:809:

```

GAGANACGAC AATGTCCAGG AAACAGAACC AGAAGGATTC ATCAGGATTC ATTTTGTATT 60
TGCAGTCCAA TACCGTACTG GCCCAGGGAG GAGCTTTTGA GAACATGAAA GAGAAGATAA 120
ATGCGGTACG TGCAATAGTT CCTAATAAGA GCAACAATGA AATTATCCTG GTTTTGCAGC 180
ACTTTGATAA CTGTGTGGAC AAAACAGTAC AAGCATTCAT GGAAGGTAGT GCCAGTGAAG 240
TACTCAAAGA ATGGACAGTA ACAGNCAAGA AAAAGAACAA AAAGAAGAAG AACTCGAG 299

```

## (2) INFORMATION FOR SEQ ID NO:810:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 413 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:810:

```

GAATTCGGCC TTCATGGCCT AGTAGCTGTT CCAGTACAAT TCAATGTTAT CCAGGTTGGG 60
TGCATGTGTA ATGATATTTT TGTACTTTTG TATCAACTCA GAATTTCCAG AGAGCTCTTC 120
CTGGCTGAAA AGATGTCCAA GGATCATCTC CGGAATGGAA GAGGTGAGGC CTGTTAGCTT 180
GTGGGCTGCC CAATCCATCC AACCCCTGGC ATTGGGATCA ATGTTGATGA GGACAAGACC 240
TTCAACAGTG TCCGGGTGGT TAAGAGCATA TCTCGCCAGG ATGTAGGCTC CAGCTCCAAC 300

```

ACCAACTCCA ATTATTGTAG AGAAATTTAG GTACTGCAGG ACGCAAGGGA TCATGTCTGC 360  
AAGCTGGTCC AGAGATGGGT ACTGATATCC CAAAGGGAAC ACAGGGGCTC GAG 413

## (2) INFORMATION FOR SEQ ID NO:811:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:811:

TTGGTATTGT CTCTGTACTA GTCTTTCCAA ATTCTGCTGT GAGCTTTTTG CTTAGACTGT 60  
AAGCCTTAGA GTCACATC ACAGTAATCC TAAAGACAGA TTTTCTGTT CTATTGATA 120  
AGGCCTTTTT GTGGTGTG CCGACTGTCA GTTTCATGTT TGTGTGTTG TTTTGGAACT 180  
GCAGTTACAT CCAGGAGACC TGTGGTGAGC ATAATGGGCT GTAGTTGTG CAGTTGTCAG 240  
TATAGCTTGT TAGGGAGCTC TTCCTGGGCA GAGTCTTGCA CAGCAGAGCC CAGTGCTGAG 300  
CTGAGTTCTT GGCACCATCT CGAG 324

## (2) INFORMATION FOR SEQ ID NO:812:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:812:

ACATTTCTTT GTAAGTTNNN AAAAGCCTAT GAGGGTTTTT TCCACGATTC CGTTCCAGT 60  
TTGGCTTTTG TTGTTGTGT GGCTGTTCTT GGCCCCCTG GGCCCTGCAG TGGAGTGGGG 120  
GGCTGCACCT GGGAGCCTCG AGCTGAGGCC CAGCCCCTCC TGCCCTGCAT TTCCTGCCA 180  
AGCAGCACCT GAGACTCTGA AGCCGATGCC TATACAGGCA GAAACCTGCC AATCCAGCT 240  
TGAACGACTG GAGGGTCCTG AGGATGGGGG TCCCTGGGGT GCCATCATGG GCAGGGTGCA 300  
TCTGTTTGGG TATGCTGCCC CCCAGCTGGC GGGGCACCGG GGACAGCTCG AG 352

## (2) INFORMATION FOR SEQ ID NO:813:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:813:

GAATTCGGCC TTCATGGCCT AGGGAAAGGG AANGTGGGGA GGGTCCGAGG GGAAGGGGAC 60  
CCCAGCTTCC CTGTGCCCCG TCACCCCACT CCACCAAGTCC CCGGTCGCCA GCCGGAGTCT 120  
CCTCTTACC GCCACTGTCA CACCGTAGCC CANATGGATA NCACNGTTGT CAGACAAGAT 180  
TCCTTCAGAT TCCGAGTTGC CTACCGGTTG TTTTCGTTGT TGTGTGTTG GTNTTTNTTT 240  
TTNTTTTNNN TNCGGAAGAC AGCAATAACC ACAGTACATA TTAAGTAGT TCTCNAAGT 300  
TNCACATACA TTNATACCAT AACCTCGAG 329

## (2) INFORMATION FOR SEQ ID NO:814:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 272 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:814:

```
GAATTCGGCC TTCATGGCCT ATCCATTTC AAATCCACCA AGGTCCAGTC GACAGACATT      60
TCCAAAAAGA ATCCTGTTCT AGGACCACTT GCGCTGAGAG CACACCCGGG GGTCAAAGGG      120
CAGCCACCGG GGGTCAAAGG GCAGCCATCA GGTACTCCCC AGGGAAGGGC TTGCGGCCAC      180
CAGTCACTGC AACCCCGCCT CACCTCCGAT GCCTGCTGTG CCCAGGGTGG TCCCGCTCAT      240
AGCGACGGCC TGNCGTNCA TANGACCTCG AG                                     272
```

## (2) INFORMATION FOR SEQ ID NO:815:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 584 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:815:

```
GATTGAATTC AATGTTAAGC ACCAATGCTG GATTGGTGG TGGACTGAAC ACCAGTGCTG      60
GCTTTGGTGG TGGCCTAGGC ACCAGTGCTG GCTTCAGTGG TGGCCTAAGC ACAAGTTCTG      120
GCTTTGATGG TGGGCTAGGT ACCAGCGCTG GCTTCGGTGG AGGACCAGGC ACCAGCACTG      180
GTTTTGGTGG TGGACTGGGC ACCAGTGCTG GCTTCAGTGG CGGACTGGGC ACCAGTGCTG      240
GCTTTGGTGG TGGACTGGTC ACTAGTGATG GCTTTGGTGG TGGACTGGGC ACCAATGCTA      300
GTTTCGGCAG CACACTTGGC ACCAGTGCTG GCTTTAGTGG TGGCCTCAGC ACCAGCGATG      360
GCTTTGGCAG TAGGCCTAAT GCCAGCTTCG ACAGAGGACT GAGTACCATC ATTGGCTTTG      420
GCAGTGGTTC CAACACCAGC ACTGGCTTTA CTGGCGAACC CAGCACCAGC ACGGGCTTCA      480
GTAGTGGACC CAGTTCTATT GTTGGCTTCA GCGGTGGACC AAGCACTGGT GTTGGCTTCT      540
GCAGTGGACC AAGCACCAGT GGCTTCAGCG GCGGACCGCT CGAG                                     584
```

## (2) INFORMATION FOR SEQ ID NO:816:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 481 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:816:

```
GAGAATGTCC AGCAAGGAAG TGAAGACTGC TCTAAAAAGT GCTAGAGATG CAATCAGAAA      60
CAAAGAATAC AAAGAAGCTT TGAAACACTG TAAGACAGTG TTAAAGCAAG AGAAAAATAA      120
CTATAATGCC TGGGTTTFTA TTGGCGTTGC TGCAGCTGAA CTAGAACAAC CTGATCAGGC      180
CCAGAGTGCC TATAAAAAAG CTGCTGAATT AGAGCCAGAC CAATTACTAG CTTGGCAGGG      240
GTTAGCAAAC TTGTATGAGA AATATAATCA CATAAATGCT AAGGATGACT TGCTTGGTGT      300
TTACCAAAG CTCCTGGATC TTTATGAGAG TGTTGACAAG CAGAAGTGGT GTGATGTCTG      360
```

```

CAAGAACTT GTGGATCTAT ATTACCAAGA AAAGAAACAC CTAGAGGTGG CTCGAACATG      420
GCACAAGTTG ATAAAAACAC GGCAGGAACA AGGTGCAGAA AATGAAGAGC TTCATCTCGA      480
G                                          481

```

## (2) INFORMATION FOR SEQ ID NO:817:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 209 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:817:

```

GAATTCGGCC TTCATGGCCT AGGGGGAGTG GTGGGTATTG CTAAGTTATC AGTTATTTAA      60
CCTTATGGAG TTTTATTTAA CCGTTTTTGT TTGACATGTT TTATATATAT GTAATTTTAT      120
TTATTCTTCA CAAAATCCCT GTGAGGGGGG TGGTACTATT GTCCCCATTT AAAGATGAGA      180
ACACTGAGGC ATGTCTAGAA TTCATCGAG                                          209

```

## (2) INFORMATION FOR SEQ ID NO:818:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 220 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:818:

```

GGCTCTGTGG AATTCCATGG CATCTTCCCC GCCCCCCCCA ACCCCCCCCT TTCCCCCTTC      60
TTTTTTTTTT TTCTTTTCT TTTCTCCCTT CCCCCCTTT CACCATTTC CCTCGGAGGC      120
GCTTTCCCCG GGCAGGGGCA GAGCCGGTCT CACCCCCGC CTCTCCCCGG CCCCCGCCGC      180
CCTATGGCGA GAGGGAGCCC CCTCCAACC CGGGCTCGAG                                          220

```

## (2) INFORMATION FOR SEQ ID NO:819:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 346 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:819:

```

GAATTCGGCC TTCATGGCCT ACACATTCTT TTAGTCAGAA ACATTAAAAT AGTAGAGTAA      60
GTTGGCTTGA AGTGAATTTT TGTGTGAAAT CTTTCTCTG CCCTAGCCTA GTTGTGCCAT      120
GCACATTGTC ACACAGGAAG AACATTTTGA GACCTGCCAG AATATGCAAT GACAGGGTAA      180
AAAATGCCGG AGGTTGACTG TGTTCATAGA CATTGTGCTA AACACTCAAC ACTCCTGATC      240
ACACTGAATG CTTTGTACAG TCCTGTGAAT TGAGGGCTAT TATTATCCCC ATTTTATATA      300
TGAGCGAGCA GAGGCCGAGA CAGATTAAAC AAGGTGCTCC CTCGAG                                          346

```

## (2) INFORMATION FOR SEQ ID NO:820:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 355 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:820:

```
GCTTATACAG TGTCCGATAG ACACCAGGAA GCNACTAGCA GAGAATTGG TAGTCATAGG      60
TGGCACTTCT ATGTTGCCAG GATTTCTCCA CAGATTGCTT GCAGAAATAA GGTATTGGT      120
AGAAAAACCA AAATATAAAA AAGCACTTGG CACTAAGACA TTTCGAATTC ATACTCCACC      180
TGCAAAGCT AATTGTGTGG CCTGGTTGGG AGGGGCTATT TTTGGAGCAT TACAAGATAT      240
ACTTGGGAGC CGTCTGTTT CAAAGGAATA TTATAATCAG ACGGGCCGTA TACCTGATTG      300
GTGTTCTCTC AATAACCCAC CTTTGAAAT GATGTTTGAT GTCGGGGAAC TCGAG          355
```

(2) INFORMATION FOR SEQ ID NO:821:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 273 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:821:

```
GCTCGAGGCG GAAGGGGAGC AATGGCATT GCGTTGGCCA TCCGTGACAC GGCATCCTAT      60
GCTCGCCAGA TGATGTTTAC GACCACCCTT CTCATTGTGT TCTTCACTGT CTGGATCATT      120
GGAGGAGGCA CGACACCCAT GTTGTCATGG CTTAACATCA GAGTTGGCGT CGAGGAGCCC      180
TCCGAAGAGG ACCAGAATGA ACACCACTGG CAGTACTTCA GAGTTGGTGT TGACCCCGAT      240
CAAGACCCAC CACCCAACAA CGACAGACTC GAG          273
```

(2) INFORMATION FOR SEQ ID NO:822:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 286 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:822:

```
GAGATAAACA AAATTGATTG CCCCATTC TCACCTCCCC ATCTTGCTT CCTAGACCCC      60
ACAGAGTTAA AACTTGGGAT TCCCTGGCC CCCCAGAAC ACTTGATAT TGTTGTTTG      120
AGGTTCTGTC CGCAGTAACA GACACAGTAT TTAATTGCAC ATACAGATGT TTGCTGGGTA      180
TATTCACGT AAATTTTATT TAATCTGTTT TTTTGTTTGT TTGGGGGTTA TTTGGGGGGA      240
GGTTGGTTTT GTTTTAAAT ATAAAAAAA AAATCTGTCA CTCGAG          286
```

(2) INFORMATION FOR SEQ ID NO:823:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 297 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double



(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:823:

GGTCTGGAGG	AGGCCCGGAG	GGGCTGTGGG	TGGACCACTG	CAGTAATCTG	GGTGAAAGAT	60
GATGATAGGC	TAGACTAATA	TGGTACCAGA	GACAAAGAAG	AGGGACTTGA	GAGTTATTTA	120
GGAGGAAAAA	AACAAAACAA	AACAAAATC	AACCAGACTT	ACGTTTGA	ATAGGACAAG	180
TGAGGAAAAG	GAGGGTTTCG	AGAATAGCTT	ATAGTTTTCG	AGAAGATGAG	GTTGGACAAG	240
ATGCCACTGC	TTTTCTTAGC	ACTCTTCCCT	CCCCTAAACC	ATCCCGTAGT	GCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:824:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:824:

GAATTCGGCC	TTCATGGCCT	ACCCTCATT	CCCCAAGTGC	CTCCTAATGG	ATCTGTCCTT	60
ATTCTTCCTT	GTTCTGTCTC	CCTCATGCCC	TGGAGCTCCT	CTCTTTGGGA	CCTTCCTCTC	120
CCAAGTCACC	ACCCTCTCTC	CCCTTCTACC	ACTCAGCCAT	TCCCCAGTTT	CCACAGTTCC	180
TCAAACATTA	CCCCACTCCC	CACTCCCCAG	TTTCCTCCCC	CTCCCCATTT	GTCCCCCTCA	240
CCTGGGGGTC	CCCGAAGTAG	ATCTGCAG				268

(2) INFORMATION FOR SEQ ID NO:825:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:825:

GAATTCGGCC	AAAGAGGCCT	AGATGTGAGC	TGGGGAAGGG	AGGGTGGCCA	GTAATGGGTT	60
TGTTATCAAG	CAGGTTTGTT	ATCACTGTGG	GTGACAAGCC	CCTTCCCATT	TGGGGCCTCT	120
GGGATCCAGT	GCAGAACATA	TCCCTCGCAG	GAGATGAGGA	ACTGGGGTGT	TCACAGAGTA	180
ATTCCCTCCC	TCACTAGTTG	AGGGCTGCCT	CTGGGGGTGG	CTGAACTACC	TCATGCAGCC	240
AGAGAAAGTC	CTCAGGCAAT	GAAATACAGA	CACTGGCCAG	CCAGCACTGA	GGTGGCGAGA	300
CCTTACTGGC	TGGTCCCCAG	AGTGTCTGCA	GCATTGTGTG	AGATCTTAAA	CTGGCTAGAA	360
GGACGGTAAC	AGCAGCACCT	GTTTCATAGG	ACGTGAAGAT	AGACGAGACA	G	411

(2) INFORMATION FOR SEQ ID NO:826:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:826:

```

GAATTCGGCC AAAGAGGCCT ACTAAAACCA TAATTGCTTG TTTTGCCTG TATCTGTCTT      60
TTCACGAACA TTTTGAGTTT AGCTCTGTCT TACATTCCCA TCCCTAAAGA TCATCAGGAC      120
TTTGTTTTTC GTGACAATGC TGGGACCAGA TTGGCCTTCA TCATCTCATA ACACCCTTAT      180
TTCCTATGGA AAAGTAAAT TGAATTATC CAGATATGAT GACTTTAGGA TATCCTTTTC      240
CCTCTTGAC ATCCTTCATT GTATTTGTGT TTTCCCTTTG GTCTCCAACG TCCCCACCAC      300
CCCCAATCCC TCCACGACTT TTAAGCCCTT GGAAGCCAAC TTGATTAGTC AGG              353

```

## (2) INFORMATION FOR SEQ ID NO:827:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:827:

```

GAATTCGGCC AAAGAGGCCT ACCGTGAGTT CCCAGGGTGG CCGGGAGGGG GAGCTGCGGG      60
GTTACAGCG GCTCCTCTCA ACGTTCCTGG CTCCGCTCCC GACTTCTCAG CCCTGCCTGG      120
AGGGGCTCAG CCACTGCTTT TAGCTGTCTG CTGGCTTTCC ACCCTTCCAG CCTGAACCTT      180
GACTTCCCCA TGAGGCCTTC CTGTGGCGGG GACACTCCAG GTCGCTGCAC CCCTTCTCTC      240
CTGAATTTCT GTAACGACAT CTAACTTTAA TTTAATTAAT TTATTTATTT AGAGATGGAG      300
TTTCTCTCTT GTTGCCCCGG CTGGAGTGCA ATGGCACCAT CTTGGCTCAC TGCAACCTCC      360
GCCTCCCAGG TTCAAGTGAT TCTCCTGCCT CGGTCTCCTG AGTGGCTGGG ATTGCAGGCA      420
CCCATCTG                                     428

```

## (2) INFORMATION FOR SEQ ID NO:828:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:828:

```

GAATTCGGCC AAAGAGGCCT AAGCGGTATT TCAGCCACAG AGTTGGTGTT GGGTTTACTT      60
ATCTATTTTG AATTAAAAG GCTTATAAAT AAAGCAGTGA CACTGCTTAC TGGGAAATGC      120
TGTACCAAAA AATGTTATCT TGCT                                     144

```

## (2) INFORMATION FOR SEQ ID NO:829:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 95 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:829:

GAATTCGGCC AAAGAGGCCT AGCGGACTAG GAGTCAATAA AGTGATTGGC TTAGTGGGCG 60  
 AAATGTTATG CTTTGTGTGTT TGGATATATC TGGAG 95

(2) INFORMATION FOR SEQ ID NO:830:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 610 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:830:

GAATTCGGCC AAAGAGGCCT AGTGGCTACC TAAATTGAGT ATCTGGCAAG AGTAAGATTA 60  
 AGCAGTAATT TGTTCCAAAG AAGAATCTTC TACCAAGGAG CAACTTTAAA GAATGAAATT 120  
 AACTTTCTTC TTGGGCCTGT TGGCTCTTAT TTCATGTTTC ACACCCAGTG AGAGTCAAAG 180  
 ATTCTCCAGA AGACCATATC TACCTGGCCA GCTGCCACCA CCTCCACTCT ACAGGCCAAG 240  
 ATGGGTTCCT CCAAGTCCCC CACCTCCCTA TGACTCAAGA CTTAATTCAC CACTTTCTCT 300  
 TCCCTTTGTC CCAGGGCGAG TTCCACCATC TTCTTTCTCT CGATTTAGCC AAGCAGTCAT 360  
 TCTATCTCAA CTCTTTCCAT TGAATCTAT TAGACAACCT CGACTCTTTC CGGGTTATCC 420  
 AAACCTACAT TTCCCACTAA GACCTTACTA TGTAGGACCT ATTAGGATAT TAAAACCCCC 480  
 ATTTCTCTCT ATTCCTTTTT TTCTTGCTAT TTACCTTCCT ATCTCTAACC CTGAGCCCCA 540  
 AATAAACATC ACCACCGCAG ATACAACAAT CACCACAAAT CCCCCACCA CTGCAACAGC 600  
 AACCACCAGC 610

(2) INFORMATION FOR SEQ ID NO:831:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 564 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:831:

GAATTCGGCC AAAGAGGCCT AGGAAGAAAC AAGAACAAGA AAAAAGATTA TATTGATTTT 60  
 AAAATCATGC AAAAAGTGCA ACTCTGTGTT TATATTTACC TGTTTATGCT GATTGTTGCT 120  
 GGTCCAGTGG ATCTAAATGA GAACAGTGAG CAAAAAGAAA ATGTGGAAAA AGAGGGGCTG 180  
 TGTAATGCAT GTACTTGGAG ACAAACACT AAATCTTCAA GAATAGAAGC CATTAAAGATA 240  
 CAAATCCTCA GTAAACTTCC TCTGGAAACA GCTCCTAACA TCAGCAAAGA TGTATAAGA 300  
 CAACTTTTAC CCAAAGCTCC TCCACTCCGG GAAGTGATTG ATCAGTATGA TGTCCAGAGG 360  
 GATGACAGCA GCGATGGCTC TTTGGAAGAT GACGATTATC ACGCTACAAC GGAAACAATC 420  
 ATTACCATGC CTACAGAGTC TGATTTTCTA ATGCAAGTGG ATGGAAAACC CAAATGTTGC 480  
 TTCTTTAAAT TTAGCTCTAA AATACAATAC AATAAAGTAG TAAAGGCCCA ACTATGGATA 540  
 TATTTGAGAC CCGCCGAGCT CGAG 564

(2) INFORMATION FOR SEQ ID NO:832:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:832:

```

GAATTCGGCC AAAGAGGCCT ANTCTGTTGA GATTTCCCCC TTTAGTTTCC AACCTTCTCC      60
CCACCTACTC ATTTATCCAT CCTCCCACC AACTCATTTA TCCATCCCAC CCACTCATT      120
ATCCATCCAT CCCACCCACT CATTATCTG TCCATCCCAT CCACTCATT ATCCATCTAT      180
CCCACCCACT CATTATCTG TCCAACCCAT CCACTCACCC ACCTACTCAT TTATCCATCC      240
CATTGCTTA CCCATCCATC TATCCCACCT AACAATACAT CCAACCATT CCTCACCTAT      300
GCATCTGTCT GTTCAGCTGT TCATCCATTC ATTGATCTTT CCATCCATTC ATCCACTCAT      360
TCACACACCT ACCTACCTAC CCACCCGCTC ATTTATTAC CCACCTACCC TCTCATCCAT      420
CCAG                                                                    424

```

## (2) INFORMATION FOR SEQ ID NO:833:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:833:

```

GAATTCGCCA AAGAGGNCTA GTCTACATCA GCTAACTTTC CTACAAGATT ATCAAATTTT      60
ACACAGTATT TTTCTGTATT TAATGACTGC CATGGTCTGC AAAATTATGT GATTAGACAA      120
TGAATGACGC TTAAAGAATG ATGACCTATT TTCTAAAGTA CACTCAAAAT ATTAAACTTT      180
AGAGACAAAG CAAAATCTAT CATAAAGTTG GCTTCTGTTG ATAGAAACAG AGAGGTAGGT      240
TAATAATCAC TGTCTAAGA TAAGCNAGAA TGCTTAGAAA TAAAAGTTGA GACCCTGCTT      300
CAAAAAGAG AAGTTGAACC TTCCAGCCCT GAGTTTCTAA TATTACATGA AAATTATGAA      360
AATGAGCATT AAGCCAGTCG CAG                                                                    383

```

## (2) INFORMATION FOR SEQ ID NO:834:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 464 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:834:

```

GAATTCGGCC AAAGAGGCCT ACTACGTAGT TGGAGCTNNT TCTTCCCCCA GCAAAGCCAG      60
AGAGCTTTGT CCCCGGCCTC CTGGACACAT AGGCCATTAT CCGTATTCC TTTGGCTTGG      120
CATCTTTTAG CTCAGGAAGG TAGAAGAGAT CTGTGCCCAT GGGTCTCCTT GCTTCAATCC      180
CTTCTTGTTC CAGTGACATA TGTATTGTTT ATCTGGGTTA GGGATGGGGG ACAGATAATA      240
GAACGAGCAA AGTAACCTAT ACAGGCCAGC ATGGAACAGC ATCTCCCCTG GGCTTGCTCC      300
TGGCTTGTTG CGCTATAAGA CAGAGCAGGC CACATGTGGC CATCTGCTCC CCATTCTTGA      360
AAGCTGCTGG GGCCTCCTTG CAGGCTTCTG GATCTCTGGT CAGAGTGAAC TCTTGCTTCC      420
TGTATTCAGG CAGCTCAGAG CAGAAAGTAA GGGGCTTACT CGAG                                                                    464

```

## (2) INFORMATION FOR SEQ ID NO:835:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:835:

GAATTCGGCC	AAAGAGGCCT	ACTGGGAGTT	CGGAGTGATT	GTTTCCTGTT	ACAGGCCAAA	60
AAATTTGTTT	GGTACTTAG	TGGTAGCATT	TTGAGAGGAA	AGTTTACAGA	AAACTAGGGT	120
TATTTTGTTA	TTATGCTTGA	ATTGTCTTTA	TTGTTTCCAA	GGCATCTTTT	TTTTTTCCTT	180
CTAGTTATCA	AGATGTTAGG	TTCTGTGCCC	TTGTGGGCCT	TCCCTCTGCC	CAAAAAAGC	240
ATGGATGAGC	AGAGTAATAT	CATTAAAATG	GCAGTCTTTG	TTAGTTTTTC	TAGAAAAGAT	300
GGTCTCGAG						309

(2) INFORMATION FOR SEQ ID NO:836:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:836:

GAATTCGGCC	AAAGAGGCCT	AAGGCAGGTT	TTTTTTTCTA	TGCTTATTGA	TTTAGCCTAT	60
CTATTTATAA	CAGTATAATT	CAGAATATAA	ATATGGAACA	AGTTTCATAA	GGAAGTTTAT	120
CTTTAACTCA	GACATTATAT	CATTAATACT	TCAAATCTCA	TTATACCATT	ATGACCTGAA	180
TGCTACATTT	TTCTTCCTGT	ATGGAGAGCT	TAGGGAAAAA	TTGTGGCCTG	ATGTCTTCAT	240
CCATTCACCTT	ATCATAGAGT	ACATAATGAT	CTCAAATATC	CAAAAATGGT	TATATTCAGC	300
TGCATATTTT	TAAGAAAACA	GGCAGGACTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:837:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 706 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:837:

GAATTCGGCC	AAAGAGGCCT	AATTGATTTT	CCATGAGTCT	TGTAATCTTT	GCTCTGCTGA	60
TTGCGTTTGC	CGTCTCTAGA	CCATCTCGCT	TGAAACAAAT	CGCAAAAGAG	GTGAATTCCA	120
GAAGAACGAC	CTGGATTGCA	GAAGAATCGG	CTCCGTTCCG	TGACTATGCT	CGTTTGATCG	180
GTACCCTTCC	AAATACGGTC	CCTCTTCCGA	GTAAGACTGT	CGATGTCGTG	AAGAACCCTC	240
CTGAGAGTTT	TAACGCATTG	GAAAAGTGGC	CGGAATGCAA	GTCCATCACG	GAAATCCGTG	300
ATCAAGGAGA	ATGTGCTTCA	TGTTGGGCAC	TGGGGAGTGG	CGGAGGTGGC	CACGGATCGT	360
CTTTGCATTT	CTTCCAACGG	AAAGGATCAA	TCCCGTCTCT	CTGCCGAGGA	TCTGTTGGGA	420
TGCTGTGACT	CTTGTGGAAT	GAAATGCAAG	GGAGGGTACA	CGGGGAATGG	CCTGGGAGTA	480
TGTACGTCAG	GTGGGAATTG	TGACGGGTGG	AGCGAATGGA	AACAAGGAAT	GGTGTAATGA	540
GTACGCGTTC	CCGAAGTGCA	GTCACGGTAT	TCAGGGCTCC	TATCCTGAAT	GCTCTTCCAT	600
CCCCCCTGAA	GATCCGGAGT	GTTCAACGAC	TTGCATAAAG	GGGTATCCCA	TCCCATATGA	660
TCAGGACCGT	CACAAAATGA	AGTCAGCCTT	CCAGCTGGCA	CTCGAG		706

(2) INFORMATION FOR SEQ ID NO:838:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:838:

```
GAATTCGGCC AAAGAGGCCT ATAAAAGTCT TATTTTTCAC TTTGTCCACT GGAATACATC      60
ATCGTTGGCC TATCATTCCA AACTCCCTAC AGTGTGGCTT CAGCTTATCT CTCTCTGTTT      120
TTTACAGGAA TCCTAAACTC TAACCCAGGG ACCCTCAACA TCTGTGCTGG GTGGACTGTG      180
GCCACATTTT CAGCTGGCCA GTGTAAGGGT TTTAGAGGCC CTTACATGAG AAGAAATACA      240
ATTTTTTAAGT CTCTGAGATG ATGTGCTTCT TACATTTTGT GAATTAAAAT GCCTCTTTAC      300
TTATAAAATG CTGGTAGTAA TAGATGGTCA TTATCTCACT GTCATTTGTG AAAGAAAAAA      360
CGATTGTAAT AGAATTCTTG CTATTTTCTT TCTCTAAGGG AGGTAAAGTT TCTCCCTAAG      420
CAAACCTTTAT GGAATGCACA ATGCTTGGCT TTCACCTTCT TTTATTCTCA CTACCACCGG      480
```

(2) INFORMATION FOR SEQ ID NO:839:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 589 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:839:

```
GAATTCGGCC AAAGAGGCCT AGAATTAAGG TGTATTATGA GCAGTTGAAG ATATATAGGA      60
AATTTTTTCC CAAACCACTA TCTCTGCTCG TTCTATTTCAT TCAGTCTGTT TATGTTATTC      120
CTTCATTCAT TCATTTTATA GAACAGTGGA GTGCCTACTG TATGCATCTA TTGTTCTGGG      180
TCCTGGGGAA AGAAAACAAA GTTCCTGCTT TCATGGAACT TACATTATAT TGGCGGAGAC      240
AGTAACAGAC AAACAAATGT AGCCTGTGTA CATGTGTTAC ATGAAAAGCA GGGTAGGGGG      300
CTGGGAGAGA GTAGTAGGGA GTGCTATTTT CGAGGTGGTT GTCAGGAAAG GCCTCACTGA      360
GGAGGTGGCA TTTTGAGTAG ACCTGAGCGC AGCGGGGGCG TAAGCCCAGG CAGCATGTGG      420
AGGAAGAGTG TTCTTGGTGA AAGGAACAAG GATAGAGGCC CGAAGCTAGA GAGCTCAGCA      480
TGATCAAGGA ACAGCAAGCC CCGTGTGGCT GGAATGGAGT GAGCAAAGGA ATGAGCAGTA      540
GAAGGTGAGT GAGTTGGGAG GTCACCAGAG ACCATGGCAA AGACTCGAG      589
```

(2) INFORMATION FOR SEQ ID NO:840:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 430 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:840:

```
GAATTCGGCC AAAGAGGCCT AGGGACTAAC TGCAACGGAG AGACTCAAGA TGATTCCCTT      60
TTTACCCATG TTTTCTCTAC TATGCTGCT TATTGTTAAC CCTATAAACG CCAACAATCA      120
TTATGACAAG ATCTTGGCTC ATAGTCGTAT CAGGGGTCGG GACCAAGGCC CAAATGTCTG      180
TGCCCTTCAA CAGATTTTGG GCACCAAAAA GAAATACTTC AGCACTTGTA AGAACTGGTA      240
TAAAAAGTCC ATCTGTGGAC AGAAAACGAC TGTGTTATAT GAATGTTGCC CTGTTTATAT      300
GAGAATGGAA GGAATGAAAG GCTGCCCAGC AGTTTIGCCC ATTGACCATG TTTATGGCAC      360
TCTGGGCATC GTGGGAGCCA CCACAACGCA GCGCTATTCT GACGCCTCAA AACTGAGGGA      420
```

GGAGATCGAG

430

## (2) INFORMATION FOR SEQ ID NO:841:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:841:

GAATTTTAC TTGTCTATAG TCTAGTATTG TTATACCATG TGGTCTTGTT ATAATCATGG 60  
 TTTCCATTCT GTGAGTCTTC AGATTATAGG CCTCTTTGGC G 101

## (2) INFORMATION FOR SEQ ID NO:842:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 479 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:842:

GAATTCGGCC AAAGAGGCCT AAATGGCGTC GTGGCATTGA GGGGCATCCC TCCTAGAACC 60  
 TCCAGGAAAA GCTCGCGGAA GACGAGGTTT TCGGAGAGA GAGGCTCCAA GCAGTCTGGG 120  
 AAGTGTAGTC CAGTTGGCTT AGCAGTAGTT TCGTTGGGGG GGAGCCGAGG TTCCGGGAAG 180  
 GGGCTAGGCC GGCTTGAAAA GAGATTATGA CTGTACCTTT TAACTTTGTA GCTGGAACAC 240  
 AAGAAGTGTT TGTTTAATGA ATGACGTACA CATTTAAGAT CTGTTTGGAC GCGGAGGATA 300  
 ATCCTGTGAA TTGCTAATAG TTTACTGGGT TTGGCCCTTA GTGTTGACTT CAGTATGCTG 360  
 AGACGGAAAC CAACACGCCT AGAGCTAAAG CTTGATGACA TTGAAGAGTT TGAGAACATT 420  
 CGAAAGGACC TGGAGACCCG TAAGAAACAG AAGGAAGATG TGAAGTTGT AGGAGGCAG 479

## (2) INFORMATION FOR SEQ ID NO:843:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:843:

TGGAAGAGCT AACTCGTCTG GCCTTTGAGC TCTTTGCTGA AGAGCAAGCA GAGGGTCCCA 60  
 ACCGCTGCT GTACAAAGAC GGCTTCAGCA CCATCCTGCA CCTGCTGCTG GGTTCACCCC 120  
 ACCCTGCTGC CACAGCTTTG CATGCTGAGC TGTGCCAGGC AGGATCCAGC CAAGGCCTCT 180  
 CCCTCTGTCA GTTCCAGAAC TTCTCCCTCC ATGACCCACT CTATGGGAAA CTCTTCAGCA 240  
 CCTACCTGCG CCCCCACAC GCATCTCGAG 270

## (2) INFORMATION FOR SEQ ID NO:844:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 413 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:844:

GAATTCGGCC TTCATGGCCT ACACAGCCAG TATCAGAACC TCAAGAAAAC GAGGACACTG	60
GGGACAGGGA CCAAAATTCA GACCACTTTT TTCTCTTGCC TTTCAATAGG ATATTCTGTT	120
AATTGAATTC ATCTGAAAAT CAAGGTCATT GCAGAGAAGT CAGCATTCTA GAGCACAGAA	180
CAGGGCAAAA CAGGACGAAA GATGGATTG GAGACCAAAT GGAGAAGGAA GAACAGAGAT	240
ACGTGTGCTC CAAATATGAC ACCCAACTTC TTTACTCAGA GCAGTTACAT GTCAGATTAT	300
ATTTTAGTTT TTCATTTCTC CTATAGGCAT ACATACTACA AGTCTATAAT AGAAAAC TAG	360
TGGCTGGCGC CGGTGGCTCA CGCCTTTAAT CCCAGCACTT TATGGCGCTC GAG	413

(2) INFORMATION FOR SEQ ID NO:845:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 126 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:845:

GAATTCGGCC TTCATGGCCT AGGCTCTGTC TACCAAAAAA AAAAAAAAAA GAAAGAAATC	60
TTGCAGTCTG AATACATGGT TGTGTTCTTA AGAAACCTGG TGATAACAAC GACAAAAC TC	120
CTCGAG	126

(2) INFORMATION FOR SEQ ID NO:846:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 269 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:846:

GCTTCATGGC CTAGTTGAAT AGTCAGTTAG AAATGGAAAG AATGAAAGTT GAACAAGAAA	60
GACAAAGCCT TAGAACAAAA GACACAGCCC TAGAACAGAA GGACAAGGCC CTGGAACCAA	120
AAGACAAAGA CTTAGAAGAA AAAGACAAGG CCCTGGAACA GAAGGATAAG ATTCCAGAAG	180
AGAAAGACAA AGCTTTAGAA CAAAAGGGCA GAGACTTAGA GCAAAAAGAC ACAGCCCTAG	240
AACAGAAGGA CAAGGCCCTA GAACTCGAG	269

(2) INFORMATION FOR SEQ ID NO:847:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 264 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:847:

GCGATTGAAT TCTAGACCCA CCTTCAGACC ATCTCGGAAG ATCTAAAAAG CCTGACCATG	60
GACCCTCACA AACTGCCCTC CTCAAGTGAA CAGGTGATTC TGGACTTGAA AGGTTCTGAT	120
TACAGCTGGT CGTATCAGAC GCCACCTCT TCCCCAGCA CCACCATGTC CAGAAAGTCC	180
AGTGTCTGCA GCAGCTGAA CAGTGTCAAC AGCAGTGACT CCCGGTCCAG CGGCTCCCAC	240
TCGCATTCCC CCAGCATCTT CGAG	264

(2) INFORMATION FOR SEQ ID NO:848:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:848:

GAATTCGGCC TTCATGGCCT AGAACATTCC AAATTTTCTT GGTTC AATA CCCTTTTTTTT	60
TCTTTTGAGG GGAAAAGAGG GGAGAAAAAC AGGAGTGATG TCATTTCTTT TTCATGTATT	120
CCAATTAAAG AAACAAGGGC AGGTCGTATA ATGGCATATT AATACATTAG ACTTAATCTA	180
GAACCCCTGT AGCTTTTTGA TGTGTTTTAT TTCTTATCTC TTTGAATTCC TGTTTGTTA	240
CTTGGCTTCC AATGGAGGTG AACTTAACAA CCATACTTGA ATATTCCGTC TTGACTTTGT	300
AAACTGTGGC TACTTGAAAT GAAGTTTATC TGGGGTCTCG AG	342

(2) INFORMATION FOR SEQ ID NO:849:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:849:

GAATTCGCCT TCATGGCCTA GGTATTCTA TTATTGTAG CTGAAATAAT TCCTGGCACA	60
AATGACTTTG AAATTTATCT CTGAACATCC CAAATTCATT ATTAGCAAAT ATCAGAAACT	120
TCACATCACT CCAGTCTGTT ATTTACATG GTTTTCTTAG GGCCTGGAAA GTTTTTACAG	180
CTGGCTTTTA TTGACTGTGG TGGCTGATAT GCTGAAGAAT GGAGTCTATT GGTGTGAGGC	240
TTCTGCCAG	249

(2) INFORMATION FOR SEQ ID NO:850:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 417 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:850:

```

GAATTCGGCC TTCATGGCCT AGACATGAAT TCTTTGACTT GTGCTCATTC TTTCTGAACT      60
TATTGAGGCT TATATATATC AAATAAGGTT AATTTACACA ATAATTATTT TTAATAATTA      120
ATAAACTCAT TCATGTAGTA TATTTTAAAA CATTATTTCC TCTCATTTTT CCTTCTCTTT      180
TTTCTTCCTA TATATTTTAA AGGTTTCAAG AGAAAACGGG CTTCAGTTTT TAAAAAATG      240
TAGACTTGCA TTTTACTGT GCTTATTAA AATAATGGAT ATAATTTATA TTAAGGTCCA      300
AATTATTTTA TTCACAGGAT AATCATGGTC TCTGATAAAA GATGCCCACA TTTCTGTGTA      360
CTCACAGTTG TTGTATATTT TTCAATTICA ATTTTGAAAG TAAACTCAAC ACTCGAG      417

```

## (2) INFORMATION FOR SEQ ID NO:851:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:851:

```

GAATTCGGCC TTCATGGCCT AGCTAGCTAT TGTAATACA AATAATAAG TCTGCATTT      60
CTGTCTTCTT TAAGCCTTCA TTGCTATTA AATCATTACA TTTAGATTA GATATTATAT      120
TTTGATCATT TGAGGAACCA AATTAAAAAT ATGGAATAAG TATGGCATTG AATTATACAT      180
GCCTATTGCT AATATATTCA TATTTTATAG GATTTAATGA AACAGTCTCC CAGCTCGAG      239

```

## (2) INFORMATION FOR SEQ ID NO:852:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 489 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:852:

```

GAATTCGGCC TTCCCTAGGA AAGTTCTTCA CATCAGGAAA CATTAGATCA TATACAGAAA      60
CAAACTAAAT TTGATAAAGT AGTTATGGAG TTTTTCATG AGTGTATGGT GAATAAATTC      120
AAGAAAACAT CTATTCGTAA GCAACAGACA AATAATCAA CAGAAGTAGT TAAAATAATT      180
GAAAAAGATG TTATGGAAGG TGTTACTGTA GATGATCACA TGATGAAGGT AGAGACAGTT      240
CATTGCAGCG CTTGCAGTGT GTATATCCCT GCTTTACATA GTTCAGTTCA GCAGCACTTA      300
AAATCTCCTG ATCATATCAA AGGGAAGCAG GCTTATAAGG AACAAATAAA AAGAGAGAGT      360
GTCTTGACTG CTACAAGCAT TTAAATAAT CCAATAGTGA AGGCGCGATA TGAACGTTTT      420
GTTAAGGGTG AGAATCCTTT TGAAATTCAA GACCATTCTC AGGATCAGCA AATAAAAGGC      480
AGACTCGAG                                     489

```

## (2) INFORMATION FOR SEQ ID NO:853:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:853:

```

GAATTCGGCC TTCATGGCCT ACTTCACTAA CCTTTTTTGT TTTAAATGA ACCTGCTACT      60
TAAAAAAAT ACACATCACA CCCATTTAAA AGTGATCTTG AGAACCTTTT CAAACCAGAT      120
GGAGCATTGC TTGCAAATTT TTTTCTCTA TGTTCATG CGCTCGTGTG TGTGTGTCCA      180
GGCAAGAACA CATTTTATAA AAATAAGAAC ACTTGGGCTG GGCATGGTGG CTCATGCCTG      240
TGATCGCAGC TCTCTCGAG                                         259

```

## (2) INFORMATION FOR SEQ ID NO:854:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:854:

```

GAATTCGGCC TTCATGGCCT ACACAGCTGC AGTCAACATC CACAACCTACC GGGACCACAG      60
CCCCTACTGC TGGCTGGTGT GGCCTCCAAG CCTTGGCGCC TTCTACATCC CTGTGGCTTT      120
GATTCTGCTC ATCACCTGGA TCTATTTCCT GTCGCCGGGC TACGCTTACG GGGTCCTCTG      180
GCACAGAACC CCAAGGCGGG CAACAGCAGG GCTCGAG                                         217

```

## (2) INFORMATION FOR SEQ ID NO:855:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:855:

```

GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAAAATAAA TAAATAACCC ACAGAGCTGA      60
GCACAGGCTT CTTCATGCTT TTCCTTTGGA AGGTGTCCTA GATATATGAT GATTTCTTTT      120
TTCTTTCACC TCCTCTTGAT TGTCACAAGT AGCTTGCTTG GCTCAGGAAC AACAGAAGAG      180
AATAAAGAAA ATGACCTCAG ACCTTCCTTA CCTCAGTCTT ATGCAGCGAC CGCAGCCAGA      240
CTCGAG                                         246

```

## (2) INFORMATION FOR SEQ ID NO:856:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:856:

```

GAATTCGGCC TTCATGGCCT ACTGTCTCAA AAAACAAACA AACAAAAAGA AAGAAAGAAA      60
AAGGAAAGGT AGACTTATAT AAAATAGACA GTAAAGCATA GGGCAGCAGA AAGGAAAACC      120
TACTCCGCAA AAGTCACTTG TTTTAACCTC ATCCAGGAGC TTCCTCTAAG TTCACCTTTA      180
TTTTTCACAC GTCCTGGGTC CAAATCCCAC CATGCTCTGC CGTATTCCTG CCCTTTGCTC      240
TGTTGTTGAA AGAGTCATGA GCGAGGCCTC TCTATGGATG GTTCCAATGA GCCACATGAA      300
CAAAGCCATC GTCAGTAAGC AGCCACTTCT CGAG                                         334

```

## (2) INFORMATION FOR SEQ ID NO:857:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:857:

GAATTCCTACT TGATCAACTT AATTCCTTTT CTTTATCTTC CCTCCCTCAC TTCCCTTTTC	60
TCCCACCCTC TTTTCCAAGC TGTTTCGCTT TGCAATATAT TACTGGTAAT GAGTTGCAGG	120
ATCCTCGAG	129

## (2) INFORMATION FOR SEQ ID NO:858:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:858:

GAATTCAAGC ACCATAATTT GGCCACTCAG CTGTCATCAG GAACTAAGCC AACATTCCTT	60
TTCAGAAAAA GACTTTGGAG AGGGGCAAAC ACTTCTGACA GTCATACTGT GTACTTATTT	120
TAGAAAAATAA GCTGCTCTCA GGCTTCAGTA TCCAGTCAAA TATAATATAG AACTCTAGTC	180
TGTTTTGAGT CCTACTACAA TAATATTTTC ACAATAGACT ACCAGTTATG AAGTTCTCAC	240
ATTTTCCCCG CATGCTCGAG	260

## (2) INFORMATION FOR SEQ ID NO:859:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:859:

GAATTCCTGT CCCACCTGCT GAATGAGTGC GTGCCAGCTG AACATCAGCG TGGCTTCGTT	60
CTTCAACACA TTTACAAAAG AAGTAAAAAT AAACAGTTTT TTCTTCTCAA TTCTCCTCCC	120
TGCTTTTTC CTTTGGAAACC ACAATCATGC CCCAGTAAGT GCTTTCCTAG GTGAGAGGTG	180
TGTGTCCCAG GTTGAAGCA AGGCCAGTGG TCTCGAG	217

## (2) INFORMATION FOR SEQ ID NO:860:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 107 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:860:

```
GAATTCGGCC TTCATGGCCT AGAATATTTT TATCATCCCA AAGCTAAAAC ATTA AAAAAT      60
TTAAAGTTTA TTCTTAGAGA TTGATGCAAC TTGCATATCT AATCGAG                      107
```

(2) INFORMATION FOR SEQ ID NO:861:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 279 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:861:

```
GAATTCTAGA CCTGCCTCGA GGGCATCCTT TACTTTTTTT TTAATTCAG CACAAACCAA      60
ACAAAATTTT AAAATTTGAT GAGATTTGAA GTTGGACAAA AGTGTATGC AGTTTTAAAA      120
ATTTTTTTTT TTTTTTTTGA GACCAGATCT CACTCTGTTG CCCAGGCTAG AGTGCAGTGG      180
CATGATCTCA GCCCAAACCT CTACCTCTTA GGCTCAAGCG ATCCTCCCAT TTCAGCCTCC      240
CAGGTAGCTG GGAGGCTGAA ATGGGAGGAT CAACTCGAG                      279
```

(2) INFORMATION FOR SEQ ID NO:862:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 266 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:862:

```
TGTATTTTTA CGTGACCTGT TTTCCAGAAT TTATGATATT TCTATGGTTG GTATTCTCAA      60
TTTTGCAAAAT GTGTCTTGGT GTGGAACCTT TTCATTTGTT TTGCTGGGGA ATTGATGGAT      120
CCTTTGCATC AAGATGCTTA TATTATTCTC TCAGTTCTGG GAAACTTCCC TGTATTATTT      180
GTTTGATAAT TGCTTCTCT CTGCTTCTC TTTTCCGTTT TTTGGAATTG CTTGTTTGTTG      240
TGTTGCATTA CTGCAGAGAA CTCGAG                      266
```

(2) INFORMATION FOR SEQ ID NO:863:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 355 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:863:

```
GAATTCGGCC TTCATGGCCT AGTGCTGTGG TAGTTTGTGC CTTTAGAGGG ATTTGTGTAT      60
CTCATATAAT TTAATTTTGT GACATTCAC TTTTCACAAT ATTCTGTTAG AATTCTTTTA      120
ATTTCTGTAA GGTGATATCT ATACTTTCAT TTATGTCTAG TAACTTGAAT CTTCTCTCTT      180
```

TTGTTCTTTC	TCGGTCAAAC	TAATAATACG	TCAATTTTAC	TGATATATCA	GAAGAACCAA	240
CTTCAAGTT	TATTAATTTT	CTCTATTGTT	TTTATTTTCA	CTACTTATCT	CCATGCTAAT	300
CTTTATTATT	TCTTCCTTCT	GTTTACTTTG	GGTTAAGTCT	GCTCTTTCAC	TCGAG	355

## (2) INFORMATION FOR SEQ ID NO:864:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 205 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:864:

GAATTCGGCC	TTCATGGCCT	AGCTTACTTT	ACAATTCTGC	TGTTTGTC	GTGTTCTAT	60
AGTTTTTTT	AAAGGTATGT	TAATAATTTT	TCCCTTTTGG	TTTATATTTG	TAGGAATCTT	120
TGCCCTTAAG	TGTGCCCCGTG	CAGAAGAATT	ATTTAACATG	TTGCAAGAGA	TTATGCAAAA	180
TAATAGTATA	AATGTGGAGC	TCGAG				205

## (2) INFORMATION FOR SEQ ID NO:865:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 368 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:865:

GAATTCGGCC	TTCATGGCCT	AGTCACTTGT	TCTGTAGAAT	ATGTTCAAAT	CTGATTTTGT	60
CTTTTGTGTT	TCTTGTTGTT	TTACCTTGTT	CCTCTATCCC	CTGTTTTTTC	TGAAAATGAA	120
AGTTAGCTTA	GAAGTTTCAT	TCCATTCTGG	TTCAAAATGC	TTAAGTGCTT	TATGTCGTGT	180
CATATTAGGA	AACACAGTAT	CTAGTGGTCC	CAATTTTAGT	GATTCAAAAA	TCAGTCTCTA	240
GGTTCAGAGA	TTAATCAGTA	GATTTCAGAGA	TCTCTCCATT	GTAAATTTCT	TAATTAACCT	300
TTGAATTGCT	AATGTTCTGT	TCAGTGATCG	TTGTGGCCCA	AATTATTTAT	TTCACTAGGG	360
GACTCGAG						368

## (2) INFORMATION FOR SEQ ID NO:866:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 144 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:866:

GAATTCGGCC	TTCATGGCCT	AAGGAGCAGC	AGGAACATGG	TACATAAAAT	CATCCTGCTT	60
CTTATAATGG	CAGGAATCAG	TGGGATATGG	TATTTGTGCA	GCATGCTGGG	GCATCCACTA	120
GAAAGGCCTG	AAGGAAGACT	CGAG				144

## (2) INFORMATION FOR SEQ ID NO:867:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 268 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:867:

GAATTCGGCC TTCATGCGAT TGAATTCTAG ACCTGCCTTG AGCCCCTCCA CCCCCAAATC	60
CTTCCTCTCC TCCCAGTCCC ACCCCTTGCC CCACGGAGTC CTGGGGACGC AGTGCCCCAG	120
CTGGGAAGAG GCGGGGATCG GGCACCTGGT CCTCCTTGTC CCCGCTTCT TGGGGGCTTG	180
CTACTTTTG TCTTCTATTG TGTGGCTTTC TGAGTATTTG AACCCAGTC CTGTGTCACC	240
TTCTTTTTC CTTCGCTGTC CCCTCGAG	268

(2) INFORMATION FOR SEQ ID NO:868:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 384 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:868:

GAATTCGGCC TTCATGGCCT ACAGAACTAT AATTTATCTT AGTTTAAGCC ACTGGTAAGT	60
GTAATTGTAA TTGTAATTG TTACATCTGC TATAGTGAAA CTAATACTGA AATTAGAAA	120
AGATGGGTAA CTTATTATGT GGTGAAGTTT AAAAAAGATA AGTAACCTGT TGAAGATCAC	180
ATAATTAGAA AAGAAAGCAG TAGAGCTTGG CCTTGAATC AACCAGTGTG ACTCCAGAGC	240
TTGTAGAACA GAATAACCAC CTCCAAGGCC AGCTGAATCT GACCACAGTC TGGTGAATT	300
CTAGTACATC TCGTTGAGAA GTGGGATTGC CGGAGGGGAG TTGGTTATTC ATGAAGGTGA	360
TGATGTTTGT CCAATGTCCT CGAG	384

(2) INFORMATION FOR SEQ ID NO:869:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 273 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:869:

GAATTCGGCC TCATGGCCTA CTTGGAGAGT TTTGTAAGGA GAGTGGCAAA CATAGCACGG	60
ACTAATGCCA CGAACAACAT GAATCTAAGC CGAAGCAGCA GTGATAACAA CACTAATACT	120
TTGGGGAGGA ATGTGATGAG CACAGCAACT TCTCCTCTTA TGGGTGCTCA GAGTTTCCCT	180
AATTTGACCA CACCTGGTAC TACATCAACA GTGACTATGT CAACATCCAG TGTTACTAGC	240
AGCAGCAATG TAGCTACAGC AACAACTC GAG	273

(2) INFORMATION FOR SEQ ID NO:870:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 278 base pairs  
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:870:

GAATTCGGCC	TTCATGGCCT	AGGTCAGGAG	CCTTCTTGGA	GTCCCAATTC	TGCATCCCCA	60
AATGATAAAG	ATGGGGTGAA	GGAAGTGA	GCCATGAGTT	GGAGAGTCCT	CTTGCTTGAG	120
GTCCCTGAGA	ATGTGGTCCC	GGAGTATCCG	GATCACTGGA	AGCCAGGACT	TCAACGCATT	180
GGGTAGTGAG	GGATGGAGGG	AGGGGCTGGA	CGCAGAAGCA	GGATGAAGTC	TGCTGGGTGT	240
GAGCCTCCAA	GGAGGTAGAA	CAAAGAGGGC	AACTCGAG			278

(2) INFORMATION FOR SEQ ID NO:871:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 270 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:871:

GAATTCGGCC	TTCATGGCCT	ACCAGACTCC	CATAATAATA	AACCCTGGTA	ATAAACAAAG	60
GAAGTCCTTC	CAGTTTCAGT	GTATCAACCA	CCACGTACCA	GATAAAATCT	TATTTACCTT	120
TTCACAATT	ACCAGTGTG	GGCTGTGAAT	TAATATTTT	ATTTTCTGT	GCATTCATAA	180
ATTAAGATTA	TTTTATTGTA	TTGTAACGT	AATTTTGAGA	CTAAAGTCTA	AAAACAAGAC	240
ATCATGAAAT	GGAGCTGGAG	GATACTCGAG				270

(2) INFORMATION FOR SEQ ID NO:872:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 339 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:872:

GGTTTAGAAA	GGGCACAAAC	AGTGCAAACC	TGTTTCATGAA	CCTTTACATG	TCATGAACAG	60
GGCAGAATGC	TTCAGGAAAG	AATTGTCGAA	AGTAAAAAAG	CAAATAATGG	ATGCAGCTTA	120
TTCTAGTTAT	TGAAGAATCC	AACGGGATGG	AAGCTAAATG	TAGCACATGG	CATGGGCGAT	180
GTCTCAACAG	TGAGTGGGAT	AACAAGTCGT	TTTAATGGTT	CAGGGCCAAT	AACCGGGGAG	240
GGTGAGGAAC	GGCATCTCTG	TTTGTAGTAA	ACAAGAGTGA	TTTCCTTCCC	TGACACTGAA	300
AAATGAAACC	TTTGGGGAGA	TAGAGGAAGC	GATCTCGAG			339

(2) INFORMATION FOR SEQ ID NO:873:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 245 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:873:

GAATTCGGCC	TTCATGGCCT	AACCTTTAAA	CCCTAAAATC	CAGGAAAAGA	AAATAAATAC	60
ATTATCATGG	ACCTGAGGGA	TTTTTACCTG	TTGGCTGCTC	TGATTGCCTG	TTTAAGGCTG	120
GATTCCGCAA	TAGCTCAAGA	ACTTATTTAC	ACTATTAGAG	AGGAATTGCC	TGAAAATGTG	180
CCCATAGGAA	ACATACCAA	GGATCTGAAC	ATTCTCACA	TCAATGCTGC	CACAGGGCCA	240
CCTCG						245

## (2) INFORMATION FOR SEQ ID NO:874:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:874:

GAATTCGGCC	TTCATGGCCT	AGTTTCTTC	ACTGGCATTG	ACAAATTTAA	GCCATTGCTG	60
CCTCATTAGC	CTTGTATTTT	GTGTGCATAT	CATATATCCA	GACCTGTATG	TTCACTTTAA	120
GCATTCTTAT	ATCACACTGT	CTCCTCATCT	ACCATATGGT	AAATGTTAAA	ACTCCACATT	180
TGTCTGCATC	AGGGAAAATG	CATGGGCACA	CATCCTCCCC	CCCTTCCCTC	GAG	233

## (2) INFORMATION FOR SEQ ID NO:875:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:875:

GGACAGGAAG	TCAACTTCAA	GCAGATTGAC	TTGAAACGGG	ATCTCATTTA	GGAAGCATAA	60
GTGTCCAATC	AAAAACTGTG	TATTTTTTTA	AATTTGGAAA	ATACTCAAGT	TCCAGTTGCT	120
TATCATTCTC	CTTCACTTTC	TGAAAACCTG	GCAATCCCAT	GTGGACTTCT	GGTAGAATGA	180
GCAATGCAAA	GAACTGGCTT	GGACTTGGCA	TGTCCTTGTA	CTTCTGGGGG	CTGATGGACC	240
TTACGACCAC	CGTTCTCTCG	GACACCCAC	ACCTCGAG			278

## (2) INFORMATION FOR SEQ ID NO:876:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:876:

GAATTCGGCC	TTCATGGCCT	AGTCCTCAAA	TTAGTTATTG	CATTATTTTC	AAGTATTGTA	60
TTATCATTTA	TTGATATTGG	TAGTGTTTCC	TAAAACAGGA	AATACATAAT	TTGGCATCCT	120
TATTCTTAGT	TTTATACCTA	AAGAACCTAG	TAATCACAG	GAGAACGTAG	TAACATTATC	180

ACTTGTTAAT CAAGCTTTCA GTGAAACAGT TTATCAAACC ATTTTTTTTA TTTTGATTCA 240  
GCAAATTTGT CAACTAAATT TAATTTAAAA GTAGAGGTCC AAAGCTCGAG 290

## (2) INFORMATION FOR SEQ ID NO:877:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:877:

GAATTCGGCC TTCATGGCCT ACTCAAATTG GAAAGAAAGA TTCCTTGAGA CTTACTTTTA 60  
AAATCTAAAG TGTGAGGNA ACANCAGAGT AAAGNCCAGA CTCATTNNAC CTTGATGTC 120  
TGCATAGATC CAGNAGTTGT ACATTTTACC TAACAACATC ACTTTTGTG AACATTCCAA 180  
CTCCAGAATG ATCCCAATC ACCCTAATCT CAGAATGCTG GAATGATGTC TGTTGGCAA 240  
CCCAGGACTC CACACTCGAG 260

## (2) INFORMATION FOR SEQ ID NO:878:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:878:

GAAGCGACCA TTCGTCCAAC AGGTATGGCT GGTTTTGTG CAATGAGAGA ATGTCCACTC 60  
GCAATGATGA GCCTGAGAAG GCAAGTCGTC CGTTTGATGT GGATCGCGAT GGTTTTGTTA 120  
TGGGTGAAGG TGCCGGGATT CTTATTCTGG AATCACTCGA ACATGCTGAG AAACGTGGAG 180

## (2) INFORMATION FOR SEQ ID NO:879:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:879:

GAATTCGGCC AAAGAGGACT ACACAGAGCC CCTGTTTGGG AATTGAGAT TCTGTGTCAT 60  
GCTGGTTTTT CTTTCAGAAT TGCTTGAAAT CGAGTTCTCT TAGCCACTGG ACACCTAGTT 120  
TTCAGGAGAA TGTCCTAAGA TTGTTTATAT ATACAAAATG GCAAAAGTAC TGTTTTTCGA 180  
ATTGATAATT CAAGCAAAGG CTTCTCTTTA CTGTCACTGA TTTTTTTTG TTTTATTTT 240  
GTTTCCTTGT TTCTATTTCC TTGAAGCTTT GAAGGGAGGA GAAGCAGAAA ATTTTGTTTA 300  
TGTTTGTTAA AAATCAGAAC TACTTAATGC TTTTGGCCAC AGCATATTTT CTTGCCCTGTT 360  
GGAGCCGTTA GGAAGATTAC CTATGTCCTA ATCTTCAACC TGAGAAGATT TTTGACTCTT 420  
GTGTCTACTG TTGATTGTTT GCTTGAGTTC TCAAAGACCT GTGGCCAGGT ATTTTAAAAA 480  
GTCGTCTATT TCTCGAG 497

## (2) INFORMATION FOR SEQ ID NO:880:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:880:

```

GAATTCGGCC AAAGAGGCCT AGCAAAATCA AATTCAACCC ATGAGTCACA GTGCTTTCTT      60
CAACAAGAAA ACATTGAACA CAGAAAGCAA TTGTGAATAT AAGGACCCTG GGAAAATGAT      120
TCGCACGAGG CCCACCTTG CTTCTTCACA GAAACAACCT CAGAAATGTT GCTTATTTC      180
AGAAAAGTTT AAGCTGAACC TAGAAGTGAA CGGTCAGAAT GAAAGCAATG ACACAGAACA      240
GCTTGATGAC GTTGTGGGT CTGGTCAGCT ATTCAGCCAT AGCTCTTCTG ATGCCTGCAG      300
CAAGAATATT CATAAGGAG AG                                     322

```

## (2) INFORMATION FOR SEQ ID NO:881:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:881:

```

GGCCACCTG TGTCTGGTT GAGGGTCTCC AGGGTCTTT GGGGCCCGAG GCCAATGGTG      60
GCAGAGTCTA CATAGAACTA TGCTTCGTGG TGTCTGGGG AAAACCTTTC GACTTGTGG      120
CTATACTATT CAATATGGCT GTATAGCTCA TTGTGCTTTT GAATACGTTG GTGGTGTGTG      180
CATGTGTTCT GGACCATCAA TGGAGCCTAC AATTCAAAAT TCAGATATTG TCTTTGCAGA      240
AAATCTTAGT CGACATTTT ATGGTATCCA AAGAGGTGAC ATTGTGATTG CAAAAGCCCC      300
AAGTGATCCA AAATCAAATA TTTGTAAAAG AGTAATTGGT TTGGAAGGAG ACAAATCCT      360
CACCCTAGT CCATCAGATT TCTTTAAAAG CCATAGTTAT GTGCCAATGG GTCATGTTTG      420
GTTAGAAGGT GACAATCTAC AGAATTCTAC AGATTCCAGG TGCTAGGCCT CTTTGGCCGA      480
A                                     481

```

## (2) INFORMATION FOR SEQ ID NO:882:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:882:

```

GAATTCGGCC AAAGAGGCCT AGGGAAGAGT GGAACAAAAG TCAGTCGTAC ATTCAGCTAC      60
ATCAAGAATA AAATGTCTAG CAGCAAGAAG AGCAAGAAA AGGAAAAAGA AAAAGATAAG      120
ATTAAGGAGA AGGAGAAAGA TTCTAAAGAC AAGGAGAAAG ATAAGAAGAC TGTCACGGG      180
CACACTTTCA GTTCCATTCC GTTGTGGGT CCCATCAGCT GTAGCCAGTG TATGAAGCCC      240
TTCACCAACA AAGATGCCTA TACTTGTGCA AATTGCAGTG CTTTGTCCA CAAAGGCTGC      300
CGAGAAAGTC TAGCCTCCTG TGCAAAGGTC AAAATGAAGC AGCCCAAAGG GAGCCTTCAG      360

```

GCACATGACA CATCATCACT GCCCAGC

387

## (2) INFORMATION FOR SEQ ID NO:883:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:883:

```

GAATTCGGCC AAAGAGGCCT AACGCAGCCA TGGCTCGTGG TCCCAAGAAG CATCTGAAGC      60
GGGTGGCAGC TCCAAAGCAT TGGATGCTGG ATAAATTGAC CGGTGTGTTT GCTCCTCGTC      120
CATCCACCGG TCCCCACAAG TTGAGAGAGT GTCTCCCCCT CATCATTTTC CTGAGGAACA      180
GACTTAAGTA TGCCCTGACA GGAGATGAAG TAAAGAAGAT TTGCATGCAG CGGTTCATTA      240
AAATCGATGG CAAGGTCCGA ACTGATATAA CCTACCCTGC TGGATTCATG GATGTCATCA      300
GCATTGACAA GACGGGAGAG AATTTCCGTC TGATCTATGA CACCAAGGGT CGCTTTGCTG      360
TACATCGTAT TACACCTGAG GCGGGCATAA CACAGCAAGA CGAGAAGACC CTATGGAGCT      420
TTAATTTATT AATGCAAACA GTA                                     443

```

## (2) INFORMATION FOR SEQ ID NO:884:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:884:

```

GAATTCGGCC AAAGAGGCCT AAACATCATT TGTACTCTAA TCCAATCAAA GAAGAAATGA      60
CTGAGTCTAA GTTCTCTAAG TACTCTGAAA TGAGTGAGGA AAAACGAGCC AAACCTCGTG      120
AAATTGAGCT CAAAGTTATG AAGTTTCAGG ATGAATTGGA ATCTGGGAAA AGACCTAAAA      180
AACCAGGCCA GAGTTTTTCAG GAGCAAGTAG AACACTACAG AGATAAACTT CTTCAACGAG      240
AGAAAGAGAA AGAGTTAGAA AGAGAACGAG AAAGAGACAA GAAAGATAAA GAAAAATTGG      300
AATCTCGCTC CAAAGACAAG AAGGAAAAAG ATGAGTGTAC TCCGACAAGG AAG          353

```

## (2) INFORMATION FOR SEQ ID NO:885:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:885:

```

GAATTCGGCC AAAGAGGCCT ACAATTTTTT GCCTTTTAC CCTTCTGTCC TTAAATGCCA      60
TCTCTTCTC AATTATTTTC TCTATTTT TTTCTGAGCA GACTTATACA AAAAGGAACA      120
TAAATTAAAT TTGCCAAATA TCAAAAGAGA GGAACTTTTT ATTTTATT TTTTGGAAC      180
GGAGTCTCAA TCTGTCTCCC AGGCTGGAGT GCAGTGACGC AATCTCAGCT CACTGCAACC      240
TCCGCCTCCC AGTTCAAGAG ATTCTCTGCC TCAGCCTCCC GAGTAGCTGG GATTACAGGT      300

```

```

ACCCTCTACC ATACTCAGCT AATTTTGTGTA TTTTGTAGTAG AGACTGGTTC ACCATGTGGG      360
CCAGGCTGGT CTCGAACTCC TGACTTCAGG TGTTCTGCCT GCTTTGGCCT TCCAAAGTGC      420
TGGGATTATA GCGGTGAGCC ACCACTCTCC ACTGAACTTT TTAATCTTAG AGCAG           475

```

## (2) INFORMATION FOR SEQ ID NO:886:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:886:

```

GAATTCGGCC AAAGAGGCCT AGGGGTGTTA ATTAGCTCAG CTGTAGCAAT CATTTTCATAA      60
TGTATATCAA AACATCCAC TGTATACTTT ATACTTTTTT ATAAAAATAA ATATTCTTAC      120
AAAAGGACAG GCGCTGTGTC TGTCTGGCTC ACCATTGTAC CCAATACCCA ACAGGGTGCC      180
AAGTACCCAA TACCCAACAG GGTGCCAAGG AACACAAAAG GCACTCAAAA TATGTTTGTT      240
GATTGGAGTT TACAAGGAAG AAAGGTATTT TCTTATCCCT CTCTCCCTT CCCACCCAAA      300
CATAGCTTCT TCTAAGAAA GAAACTGAGG CTGGGCAAGG TTAAAAGCTA GCTCCTGGTA      360
CTTTTGCATC CACACTCAGT TTACCTGTGC CTTAAACCAG ACTTCATCAA ACTTCAGTCT      420
TCACAAGTCA CTTCAACCATT TTTGCTCTAC CTACTTACTG CCTGTGTAGG CCTCTTTGGC      480
CGAG                                                                484

```

## (2) INFORMATION FOR SEQ ID NO:887:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:887:

```

GAATTCGGCC AAAGAGGCCT AGTGGGACAT AAGGCTGGAA GGTAGCACAC ACAGCACCAT      60
ATTCTTTTTT ACTTGCAATG GAGTTACTTT GAGTGCTTTT CTCTTTACCA AATATATGAG      120
TTCTATTACT ACATTCCTTT TCTTTGTTTG TTTTAGTGAG ACAGGGTCTC GTTCTGCCTC      180
CCAG                                                                184

```

## (2) INFORMATION FOR SEQ ID NO:888:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 78 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:888:

```

GAATTCGCCC AAAGAGGCCT AGTTTGCAGC TTACTTTTAA TTTCAAATCA GCTGCAGATG      60
TTTGGGAGCC TTCTCGAG                                                                78

```

## (2) INFORMATION FOR SEQ ID NO:889:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 546 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:889:

```
GAATTCGGCC AAAGAGGCCT AATGGAAGAT ATGCTGAAAG ACTTTCTCCT TGGAGAACAC      60
TTATTATTGG TTGGCAACCA GGGTGTAGGA AAAAACAAGA TTGTTGACAC ATTCCTTCAC      120
CTGCTCAACA GACCCGAGA ATATATTCAG CTACACAGGG ATACCACAGT ACAAACCTCTT      180
ACGCTTCAGC CTCGGTTAA AGACGGACTT ATTGTATATG AAGACTCACC TTTGGTTAAA      240
GCAGTAAAGT TGGGTCATAT TCTGGTAGTA GATGAGGCTG ACAAAGCTCC AACAAATGTC      300
ACGTGTATTT TAAAACTCT AGTAGAAAAT GGAGAAATGA TTCTAGCAGA TGGAAGACGC      360
ATTGTTGCAA ATTCTGCTAA TGTGAATGGA AGAGAAAATG TTGTAGTGAT TCATCCTGAT      420
TTTAGGATGA TTGTTCTGGC AAATAGACCT GGATTTCTT TCCTAGGCAA TGATTTCTTC      480
GGTACCTTAG GTGATATTTT TAGCTGCCAT GCAGTTGATA ACCCCAAACC CCACTCGGAG      540
CTCGAG                                         546
```

(2) INFORMATION FOR SEQ ID NO:890:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 427 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:890:

```
GAATTCGGCC AAAGGGCCTA GAGATTTTCAT GTATTTCTCT TCACTTCCAA GAGAGTGGAT      60
AGAATGGAGA AATCTAGATT GATCTTTACA GCTCCAGATA AAGGGACTAA AAATATTGGT      120
TTAAAATATT AAAGGTTAAA GAAAGAGACT GTTGGTTTCT TTCAAAGTGA TTTAAATTTA      180
AACTAGGTTT TTATTACTAA GTTTTGGAAA TGGGGTAACC ATTTTCTTCT CATATCAAGG      240
ATATGTACAT ATTTCCCAT TCCCCATAAT TAAAAACAAA CAACTCCCAT CCACTTCTTA      300
TAAATAGTTC TTAACCTGGG CTTAGTAACA ATGTATATTG TGCCAGTAAT ACAGAAAAGG      360
TGGGAGTATA AAGACCATCC TGTCTGTGTA GAATCCTATA GAACCAAGGT GCTGGATTAT      420
GGTGGTT                                         427
```

(2) INFORMATION FOR SEQ ID NO:891:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 346 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:891:

```
GAATTCGGCC AAAGAGGCCT AATTTTATTG AAAGTCTTGA TGTATGTCAA AGGAGCCAC      60
AACTTCAGCT ACACAACTTT TTGTATTGAA AGAACTCATA CTTTTGTAG CTTTTATTTT      120
ACATTTAATT TAAAGTGACT TTAGCACTA AAATGCCTAG AAGATTTTAC TCCAGACCTA      180
TAAGGAAATG TTAGTTTTT ATGAAAAATG ACAAGTCGAT GGTTAAACTT CTCATGTCTT      240
TGGTGCTTTG GCCCTAATAG CACTGGACAA CACCACGACC ACATGGAAAC ATATTTTGTG      300
```

AAGCAAACT TTAATTTTAT ATAACGTATG CTATGGAGAA CTCGAG

346

(2) INFORMATION FOR SEQ ID NO:892:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 95 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:892:

GAATTCGGCC AAAGAGGCCT AGTGGAGAGT GAAGCTTAAG ACTGCAATTG CAGAAAAAGT  
CCATGAGGAG AGAAGAAGGA GAAAAGGGG AAGAG

60  
95

(2) INFORMATION FOR SEQ ID NO:893:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 424 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:893:

TTTTTTTTTT TTTTTTTTAA ATACTTCGCA TACTCTCCAA TGCCCCAAAA TAGCAAGGTG  
GTAAAAAGAG AATTAGATGA TGATGTTACT GAGTCTGTCA AAGACCTTCT TTCCCAATGA  
AGACGCAGCT GATGATGCTT TTAAGACAAG TGAAGTAATT GTTGATGGCC AGGAAGAGAA  
AGATACAGAT GTTGAAGAAG GATCTGAAGT CGAAGATGAA AGACCAGCTT GGAACAGTAA  
ACTACAATAC ATCCTGGCCC AAGTTGGATT TTCTGTAGGT TTAGGAAATG TGTGGCGATT  
TCCATACCTA TGTCAGAAGA ATGGGGGCGG TGCATATCTT TTACCATATT TAATACTACT  
TATGGTAATA GGTATTCCCC TTTTTTCTT GGAAGTCTCT GTGGGTCAA GAACCACTCT  
CGAG

60  
120  
180  
240  
300  
360  
420  
424

(2) INFORMATION FOR SEQ ID NO:894:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 390 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:894:

GCCAAATCA AGCAAGTAT GAAGAAAGAT AAAGAAGGGG AAGAAAAAGG GAAGCGAAGA  
GGATTCCCCA GCATCCTGGG ACCCCCACGG AGACCAAGCC GTCATGACAA CAGTGCAATT  
GGCAGAGCCA TGGAAGTACA GAAGGCGCGC CACCCTAAGC ACTTATCCAC ACCCTCATCT  
GTGAGTCCTG AACCTCAGGA CTCTGCCAAG TTGCGCCAGA GTGGGTTAGC AAATGAAGGA  
ACAGACGCTG GATACCTGCC TGCCAATTCC ATGTCTTCTG TAGCTTCAGG GGCCTCTTTT  
TCCCAGGAAG GAGGGAAAGA GAATGATACA GGATCAAAGC AAGTTGGAGA AACATCAGCA  
CCTGGAGACA CCTTAGATGT CACCCTCGAG

60  
120  
180  
240  
300  
360  
390

(2) INFORMATION FOR SEQ ID NO:895:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 595 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:895:

```

GAATTCGGCC TTCATGGCCT AGTAGCTGGT ATTTATTCCC CAAAGTAATA ATGTTGAAGT      60
ATGGGTCTCA TCATTCCCAT ACACAGAAAC ACAAACACT TTGATCATAA ACTTTTTTCT      120
TCAGAAGCCA AACTAATTG CAGAATAATA GAGCCACTGG TTAATGTTT CCTCAAGATA      180
GGTTTTAGTG TAAGCTAGTA TTCTGTGTGT TCGTAGAAAT GATTCAATAC CTGCAGCTGG      240
TGAATTAGGA ATTGTATTTG TTGCCTTTTT TATATTAGAT GAGGTGCAAA AATTTTAATG      300
CTAGTCAGTA TGCACCACCA CAGGAAAGTT AGATCCCAT AGCACTTGAA ACTACAGCTT      360
TGGAACCTTA GGCTAAGTTA ATTTGGATTT GTTACTTGAT TCACCTACTG ACCTTTTCTT      420
TTGTTTGAAG TGCTTATCAG CATAATGAGC TAAGTGTCAT GCATATTTGT GAAGAAACAC      480
CCTTTTTTGT CCCTTTTGGG ACAGAGAGGT ACTCCTTGAT CTTTATGAAT GACAGGTAC      540
TGTTTTGCCT TATTGCTTAA CTTAATGTAG TGAATAAAG CAGACGAGGC TCGAG      595

```

## (2) INFORMATION FOR SEQ ID NO:896:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:896:

```

GGCTGATCCG CGTGAACATG GAGGACTTGC GAGAGCAGAC TCACACCCGC CACTATGAAT      60
TGTACCGACG CTGTAAGCTT GAAGAGATGG GGTTCAGGA CACTGACCCT GACAGCAAAC      120
CCTTCAGTCT TCAGGAGACA TATGAAGCAA AAAGGAATGA ATTCCTGGGA GAACTGCAGA      180
AGAAAGAAGA AGAAATGAGA CAAATGTTTG TTATGAGAGT GAAGGAGAAA GAAGCTGAAC      240
TTAAGGAGGC AGAGAAAGAG CTTACAGAGA AGTTTGACCT TCTAAAGCGG ACACACCAAG      300
AAGAAAAGAA GAAAGTGGAA GACAAGGAGA AGGAGCTCGA G      341

```

## (2) INFORMATION FOR SEQ ID NO:897:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:897:

```

GAATTCGGCC TTCATGGCCT ATGCCTTAAT TTTGCTGTTT GCCCTCGGAT CTCTGGGTTT      60
GATTTTTCG TTTGACTTTAA ACAGACATAA GTATCCCTT AACCTGTACC TACTTTTGG      120
ATTTACGCTG TTGGAAGCTC TGAAGTGGC AGTTGTTGTT ACTTTCTATG ATGTATATAT      180
TATTCTGCAA GCTTTCATAC TGACTACTAC AGTATTTTTT GGTGTTGACTG TGTATACTCT      240
ACAATCTAAG AAGGATTTCA GCAAATTTGG AGCAGGGCTG TTTGCTCTTT TGTGGATATT      300
GTGCCTGTCA GGATTCTTGA AGTTTTTTTT TTATAGTGAG ATAATGGAGT TGGTCTTAGC      360
CGCTGCAGGA GCGCCACTCG AG      382

```



## (2) INFORMATION FOR SEQ ID NO:898:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:898:

```

GAATTCGGCC TTCATGGCCT ACGAGCCTCA CATCACTTGT ACAAGCCACC TGGGAGAAGT      60
GGCCCTCAGG AAGATCCTAA AACCAATACA CAAATACAAC TTTTTCATT CATTAAATACA      120
TCAAGTTCAT ATAAGAGTCA AACAGGTAAA AGCAGCATCC CAAACTGTTT TCTCCTCGTA      180
CATGTCAGTT CCACGATCCT CAGTCTCATA AAGTCAGGGA CTAGAGACCA ATGTAATTAT      240
CAATACGTAC CTGCCTTTGA GTGAACCTTC AATGCCAACT AGGAAGGGCG CTTCCAAAAC      300
GACGTTATTT GTAACCTCCTA GGAAGACAAA CACGGGTCAG AACCCATACT CTGCGGGCCT      360
TGAAATGGAA AATCTCTCCT CTAGACAGAC TCATCCTGGC CGTAAATATC AGGAGACTCG      420
AG

```

## (2) INFORMATION FOR SEQ ID NO:899:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 806 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:899:

```

NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      60
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      120
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      180
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      240
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      300
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      360
NNNNNNNNNN NNCNTTGCAN GNTTTGGTTC CNTTTNTTCC TTGTTTNTTT TTTTGCACAA      420
TATTTCAAGN TTTACNAGGC ATACATCAAT CCAAGTTCGG AATTTTAATT AAGAATTCGG      480
CGTTCATGGC NTAAAAGAAN TTGATGCTAC CCCCAGAAAT GCCAGAAGAG GANATACATT      540
GAAATAGACN GTGATGAAGA GCCCAGGGGT GAATTACTTT TTNTTCGGGA CANTGAACGC      600
NTTCATAAAA AGCCAAAGTC TGACAAAGAG ACAAGAGTNG CAANTNCAAT GGNTGGANAG      660
ACAGACCGAA AAGAATTTNT GAGGAAGAAA ACCAAAACAA ATCCATNNTC CAGNTCGACA      720
AATNAAGAGA AGNAAANACA GAAGAACTTT ATGATGATGC GGTATAGCCA GAATGTCCGG      780
TCAAAAATA AGCATTCCTT CTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:900:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:900:

GAATTCGGCC	TTCATGGCCT	AGGAGGGCCT	GTTTCAGAAT	TGCTTTAATA	GTTCCCTTCC	60
AGTTGAATTT	ACCTTTTGCA	GGAGCCTCAT	CGTCTTCTGG	TTCTCCGCCC	TCAGGATGCT	120
CTGGGAGCTT	CATCTTTTTC	TTCTTAGAAT	CTGTTTCAAC	TTCCGAGTGC	CTCCGCTTCC	180
TCTTCCCTGC	CCCACGCGTG	CCTCTTCCTC	ACTGGCGCTG	TCCTTGCGCT	GCTTCTTCTT	240
CTTGCTCCTC	TTCCCTGCAG	AGCCATTGGC	CTCAGGGACT	TCCTCCCCAC	CAGCCTCAAG	300
GTCAGCCTCC	TGCCTCGAG					319

## (2) INFORMATION FOR SEQ ID NO:901:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:901:

GAATTCGGCC	TTCATGGCCT	AAGAAAAGAC	AAGGTCCCCA	TAAGAGTGGC	GAGAGGAACA	60
GAGCCAGGAC	ATCGGAAAGC	AAGCCCCTGT	GTTCCCAAAC	CGCAGAAGAG	GGAGCTCTGA	120
TGTTAGACAA	GCCACCCTCC	TACAAGCGAA	GGGAAAGTAA	CTTTGAGCAA	AAATGAGCAA	180
CAGAAAATGA	GATCAAGGTC	AGATCTCATA	CAAAGTTGCA	AGATGAAAGA	ATGAGCAGCA	240
GAATAACCTC	CCTGTGATGT	GGAAAGTGTG	CCAGGAAAAC	AGACCCAAAC	GCTCGAG	297

## (2) INFORMATION FOR SEQ ID NO:902:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:902:

GAATTCGGCC	TTCATGGCCT	AGGGGTTCTT	TCTCCTGCAC	GATGCCAGGT	GGTACTGGAA	60
TCTGCTGAGT	GGGATTCCGT	GGTGAGGATC	ATAAGGGCAA	ATTTCAAAGG	CTTCTGGCTC	120
CATGAGAAAT	TCTTGAAGCA	GGGTATCTCA	CTGCTAGAGT	CTAACGGAAA	TGCTTCTTGT	180
GGAGAAGCCC	TTTGTAAGA	AGGATGGAGT	TGTCCTCTGC	CCAGTTTTGG	CCCTTGGGAT	240
TCTGTAGGTG	ACGGTCTTAA	CTTGTGGTCT	GTTCTCTAGG	ACTGTGAGTG	GTGGATTAGA	300
AGAGAGATGA	GGAGCTGCCA	AAAGCAGCTA	CACAGAGAAC	AGAGTTAGCA	AATGGCACCC	360
GAGACAGAAC	TATAGCAGAT	GCAAGAGCCA	AAAACCCACA	GCCGCATTGA	ATTCTAGACC	420
TGCCTCGAG						429

## (2) INFORMATION FOR SEQ ID NO:903:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:903:

GAATTCGGCC	TTCATGCCTT	GTAACCATCA	GGTAGATACA	GCACCAACGG	TAGTGGCTCT	60
------------	------------	------------	------------	------------	------------	----

TTATGACTAC ACAGCGAATC GATCAGATGA ACTAACCATC CATCGCGGAG ACATTATCCG	120
AGTGTTTTTC AAAGATAATG AAGACTGGTG GTATGGCAGC ATAGGAAAGG GACAGGAAGG	180
TTATTTTCCA GCTAATCATG TGGCTAGTGA AACACTGTAT CAAGAAGTGC CTCCTGAGAT	240
AAAGGAGCGA TCCCCTCCTT TAAGCCCTGA GGAAAAAACT AAAATAGAAA AATCTCCAGT	300
CCTCGAG	307

## (2) INFORMATION FOR SEQ ID NO:904:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:904:

GAATTCGGCC TTCATGGCCT AGGACCTCGT AGGTCCTTAC AGCACCACAG TGCTCTTCAT	60
CTCTCAGAGG ACTGAACCAC CAGCCAGCAC CAACAGAGAC ACTGTGGAAA GCACAAGGAC	120
CCGACGGGCA CTGAGTGACG AGCAGTGTGC TGCCGTCATC CTTGTGCTGT TTGCTTTCTT	180
TTCCATTTTG ATTGCCTTTA TCATTCAGTA CTTTGTAATC AAGTGGAAAT ATAACCTTTAT	240
TTTTTAACTC TATTACATTT TATTTGTCA TGTACTAAAA TTATTTCTGT ATTGCTTTNA	300
TAAAAACAG TGGCACCTCG AG	322

## (2) INFORMATION FOR SEQ ID NO:905:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:905:

GAATTCGGCC TTCATGGCCT AAAAAACAC ATAATTGAA TCAACACAAC CACCCACAGC	60
CTAATTATTA GCATCATCCC TCTACTATTT TTAAACCAAA TCAACAACAA CCTATTAGC	120
TGTTCCCCAA CCTTTTCCTC CGACCCCTA ACAACCCCCC TCCTAATACT AACTACCTGA	180
CTCCTACCCC TCACAATCAT GGCAAGCCAA CGCCACTTAT CCAGTGAACC ACTATCAGCA	240
AAAAAACTCT ACCTCTCTAT ACTAATCTCC CTACAAATCT CCTTAATTAT AACATTCACA	300
GCCACAGAAC AACTCGAG	318

## (2) INFORMATION FOR SEQ ID NO:906:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:906:

GAATTCGGCC TTCATGGCCT ACAGGAAACA TACAAGCTG CTCATAGTGG GAGTCTTTTT	60
GCTCATGTTT GTGTGCGGCC TCTTCTTAC TCGACCTTCA GGCAGCTACT TCATCAGACT	120
GCTGAGTGAC TACTGGATAG TCTTCCCCAT CATCGTCGTT GTCGTATTTG AAACCATGGC	180

TGTATCCTGG	GCCTATGGGG	CCAGGAGGTT	CCTTGCAGAC	CTGACGATCC	TGTTGGGCCA	240
CCCCATCTCT	CCCATCTTTG	GTTGGCTGTG	GCCCCATCTG	TGTCCAGTTG	TGCTGCTAAT	300
CATCTTTGTG	ACCATGATGG	TTCATCTTTG	TATGAAGCCG	ATCACCTACA	TGTCCTGGGA	360
CTCAAGCACC	TCAAAAGAGG	TGCTTCGACC	ATACCCACCG	TGGGCACTGC	TCTTGATGAT	420
CACCCTTTT	GCCATTGTCA	TCCTCCCCAT	CCCTGCATAC	TTTGTATACT	GCCGCATACA	480
TAGGATTCCC	TTCAGGCCCA	AGAGCGGAGA	CGGGCCTATG	ACAGCCTCCA	CATCCCTACC	540
CCTAAGTCTC	GAG					553

## (2) INFORMATION FOR SEQ ID NO:907:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 557 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:907:

GAATTCGGCG	TTCATGGCCT	AGTAGAGAAG	ANNNTATTGC	NGTGACAATG	AGGTTTCTAC	60
GTTCAAGTGC	AAGAGTTTTT	GTTATTCTGA	GTGTGGAAAT	GGCTTCATCC	AAAAAGAAAA	120
ACAACTTTAT	TCCACAGCCA	ATTGGAAAAT	GCAAGCGTGT	ATTCCAAGCA	TTGCTACCTT	180
ACGCTGTGGA	AGAATTGTGC	AACGTAGCAG	AGTCACTGAT	TGTTCCCTGC	AGAATGGGGA	240
TTGCTCGTCC	AACTGCACCA	TTTACCCTGG	CTAGTACTAG	CATAGATGCC	ATGCAGGGCA	300
GTGAAGAATT	ATTTTCAGTG	GAACCACTAC	CACCACGACC	ATCATCTGAT	CAGTCTAGCA	360
GCTCCAGTCA	GTCTCAGTCA	TCCTACATCA	TCAGGAATCC	ACAGCAGAGG	CGCATCAGCC	420
AGTCACAGCC	CGTTCGGGGC	AGAGATGAAG	AACAGGATGA	TATTGTTTCA	GCAGATGTGG	480
AAGAGGTTGA	GGTGGTGGAG	GGTGTGGCTG	GAGAAGAGGA	TCATCATGAT	GAACAGGAAG	540
AACACAGGAA	GCTCGAG					557

## (2) INFORMATION FOR SEQ ID NO:908:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:908:

GAATTCGGCC	TTCATGGCCT	AAAAAAGTCA	GCCAGGTGTG	GTGATGTGCG	CCTGTGGTCC	60
CAGGTATTCA	CGAGCTGAGG	TGGGAGGATC	ACCTCAGCCC	GGGAGGTGGA	GTTTGCAGTG	120
AGCCCATATC	CCGCCACTGC	ACTCCAACCT	GGGAGACAGA	GCGAGACCCT	GTCTCCAAAA	180
AAAAAAAAAA	AAAATCCGGG	ATCTATTTAT	GTAACCTACTA	GAATCTTAAG	TTCAGAATTT	240
ACTCCATAAG	AGTATATAAA	AACTTACTG	TGATTTTATC	CATGTTTTTC	CTAATATATA	300
ATAGGTCTAA	GTCTTGTA	TTTCTGTCCT	GTCCACAGAG	CCTTGAAAT	AATTTAGAGC	360
TCAGTCATTC	AGTTTGGATT	TATGTATAAA	TTGAAATATA	TTAATTACTT	ATTATAGTG	420
CAGCTCGAG						429

## (2) INFORMATION FOR SEQ ID NO:909:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:909:

```
GAATTCGGCC TTCATGGCCT AGTCCCTGAA AAAAAAAAAA GAAAAAAAAA ATTTAAATAG    60
AGGAAATACT AGCTAAGTTT AATGTAGGCC AGTTCTAAAA TAATGATTTA TTGCTGCTGT    120
TGTTACATAA TTTTCTTAAA TATTTTAAAG ATTGCACACT GTCTGCTCGT AGGCCATGAA    180
```

(2) INFORMATION FOR SEQ ID NO:910:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:910:

```
TACCTGCAGT TGTACCGGT CACATGTGAC CAAACCTACC TGCTCCGATC CCTGGATTAC    60
GTAAAAAGAA CACTTCGGAA TCTGAATGGC CGCAGGGTCA CCTTCCTCTG TGGGGATGCT    120
GGCCCCCTGG CTGTTGGAGC TGTGATTTAT CACAACTCA GAAGTGACTG TGAGTCCCAG    180
GAATGTGTCA CAAAGTGAGT TTTAGAACTG GAAACATTTT CTCCAATTC CCAGTGGAAG    240
CTCTTGCTGT AGAAAGATAT TCAGAAAGGA AACTATTTTT CCATTCATCC ATTGTTGTAA    300
ACAGATCACT CCAAATGTT AATCTTGAGC ATAGTGGTGG GATCATATGC CCTCTTTTAA    360
TCCAAGCATG TGTGTGCCGG TCTCGAG                                     387
```

(2) INFORMATION FOR SEQ ID NO:911:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:911:

```
GAATTCGGCC TTCATGGCCT AGTGTCTTGA CAATGGTTGA GCTGGTTTGG ATCACAGGAA    60
CATTTATTTG ATAACGATGG AAGGAAAAAA CAGTGCTGTA ATAAGTCGCT TCTTAAATG    120
TGGGGTGTTA TTAAGAAGAT AATGGGAAAG TGCTACTGGG AAGGCAAACA CAGCAATTGT    180
ACTCTACAGA CAGGGATTCT CCTATTGGCC ATTTTAGAAA CATTCCCCAG GCAACATGAG    240
ATTATCCAAG TGGAGAGAAC CAGAGTCAGA GCCATTTCTT AGGCCGACAG AGCAGCGCTC    300
CAGATGAGAT ACTGAAGGTT TGAAGTCAAG TGATGGCAGT AAGATCAGAA AGCAAAAGGC    360
ATATCACAAA GAAACCATAA GATTCTCCAT CTGGATATAT AGAAGATAAA TGGAAAGAGA    420
AACTCGAG                                     428
```

(2) INFORMATION FOR SEQ ID NO:912:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:912:

GAATTCGGCC	TTCATGGCCT	AGAAAACCAA	ATACTGCATG	TTCTCACTCA	TAGGTGGGAA	60
CTAAACAATG	AGAACACTTG	GACACAGGGC	TGGGAACACC	ACAACTTCTT	TTTCAGTTCA	120
TAACTCATAG	TCCACGATCC	ATGTGCTCTT	TGACTTGACT	TTTCTTAAAC	TCCTATTTTA	180
TGTGCTTCTG	ACTTGCTTTC	CCTTCTTATT	TGTAATCCAC	ACTAGCCTCA	AAAGATGCAT	240
GAACTGTGAA	TTTTCACTTC	CAGGGCCATG	GATAGTTGAA	CATCTAGTAG	TGAATTTCTT	300
CTTTCAGAAG	ATAAATAAAT	TCATTCATTC	CCCTGGATCT	AGAAGGACAC	ACTCGAG	357

## (2) INFORMATION FOR SEQ ID NO:913:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:913:

CAGCCTGGGT	GGCAGAGCAA	GACTCCATTT	CAAAAAAAAA	AAAAAAAAAGC	CCAAGTCACT	60
TGCTGTTTCT	GGATCCAGTA	ACGCTGCCTC	AAATTTGATT	CAGTCACCTC	ACATACTTAA	120
CATTCTGGCT	TTCTTTCTCT	CTGTTTCTGG	CATCTGGAGA	TTTCTTTTTT	TTGTGTGTGA	180
GCTCATTTAT	GGTTATCTGT	TGTTATGTTT	AATACAACCA	TTCTTGCTG	AGGCTGCCAC	240
ATCTAGAGCT	GGTAACTCG	AG				262

## (2) INFORMATION FOR SEQ ID NO:914:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:914:

GAATTCGGCC	TTATGGCCTA	GTGATATGTC	ATAATCCCTT	CTGTGGGCTG	GGCCACATA	60
AGGAGAGTCA	AATCACTTGG	GTGCTGGGAA	GAGGCACATG	TCACACGTGC	AAGAAGGTCC	120
AAGGATGAGA	TTAAAAATTG	CACAAAGGTC	CAAATTCTAG	GGCCCAGACA	GAAGAGAAGA	180
GTCACATCAT	CTAGATGATG	AATGAAAAGA	TATGTCATTA	TTCTCCTTTG	GGCAGTGCTT	240
CTGCAGAAAA	GTTGCACCTT	CTAGGTGTTG	GACTCAGCAA	TATATCACAA	TGTCTGCAGT	300
ATTTTGGAAG	GAGAGGAGAG	TCACCATTAC	TTAGGTGCTA	GGCCCAGCAA	TACATCTCAA	360
GCACTTCTTG	GGCAAAGCCC	AAGCAGTAAA	AAAGAGTCAC	ATTACCTAGG	TTCTGGGTAT	420
AGCAATATGT	CACAAATGCC	CCTAAGAAGA	GGGCCAGGA	AAAGACTCGA	G	471

## (2) INFORMATION FOR SEQ ID NO:915:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:915:

```

GAATTCGGCC TTCATGGCCT AGAGTGCCTG ACCTTCCCTG TTCAAGAATT TATAAAGATT      60
CCTAACAGCA ATTCTAGAAA AAGGATAAAG ACCTCCACTT GGCTTTCAGA AGCCTCCAGC      120
ATCTGGCCCA AGCTAATACA GCCTTAAAC TAATCTGGTT ATAGCCCAGC CCCTCATTTT      180
ACAAAGAAAA CTGAGACCCC TGGCTATCTA TTAACGCT CCAACCAAAC ACATCATCTA      240
TCCCCTCTCT TCCTCCAGAT AACACTCACT TACCAGGCTA CAGTGAGGTC CACGTCTCTG      300
ATATGAGGCT CCTGTCCACA AGTTTGGTAA CCTTCATCTG CCTCATCACC AGTGAGCACC      360
CAGCACTTAG CACTGTGCCC GACACAGAAA TGAACACTCT GCTCCTCCGG GCCGGCGTGG      420
GTGCGCCGCT GCGGCCACCG GCAGCGCTCG AG                                         452

```

## (2) INFORMATION FOR SEQ ID NO:916:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:916:

```

GAATTCGGCC TTCATGGCCT ACAAATGGTT GGTATTATGTT ATGATAGCAA TTTTCTGCAT      60
AGCATCAGCA ATGAGTCTGT ACAACTGTCT TGCTGCACTA ATTCATAAGA TACCATATGG      120
ACAAATGCACG ATTGCATGTC GTGGCAAAAA CATGGAAGTG AGACTTATTT TTCTCTCTGG      180
ACTGTGCATA GCAGTAGCTG TTGTTTGGGC TGTGTTTTCGA AATGAAGACA GGTGGGCTTG      240
GATTTTACAG GATATCTTGG GGATTGCTTT CTGTCTGAAT TTAATTAAAA CACTGAAGTT      300
GCCCAACTTC AAGTCATGTG TGATACTTCT AGGCCTTCTC CTCCTCTATG ATGTATTTTT      360
TGTTTTTATA ACACCATTCA TCACAAAGAA TGGTGAGAGT ATCATGGTTG AACTCGCAGC      420
TGGACCTTTT GGAAATAATG AAAAGAATGA TGGAAATCTC GAG                                         463

```

## (2) INFORMATION FOR SEQ ID NO:917:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:917:

```

GAATTCGGCC TTCATGGCCT AACGTAAGTT AAAAGGCTTT CCTTTACACT TCCAGGACCA      60
AACAGCAACT TCCTGCCACA CACTTCCACC CTATCACTGG GAGAAATCCT TTTCTGGACA      120
TGAGCCTTTG ACCTGGGTGG GGCAGAAAGA ACCACAAACT CCATCTCCCA ATAGAAGTTT      180
GAAATTCAGT CAGCTTTTCC TTTCATGCTG TTTGTTGCCT GCTTGTTGCA CTCCTCCTGC      240
CCCAGAACTG CAAGATTTTT AGCTTCACCC CTTTCTGAGA GTAATGTTAT CTTTTATCAG      300
AATCAGTATC AGTTCCTCTG TATTCTGTGC TTCATCGAAT TTGCAAGACT GACCTCTTTT      360
AAGCATTTAA TTCACTCCCA GAATCTCGAG                                         390

```

## (2) INFORMATION FOR SEQ ID NO:918:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:918:

GAATTCGCCT	TCATGGCCTA	CAGTGACAAT	GAACAAAACC	AGCACACCAC	ACAAATGAGT	60
GATGAGGAAG	AGGATGATGA	TGGCTGTGAC	CTTTTGTCTG	ACTCTGAGAA	GGAGGAGGAA	120
GATATTGAGG	ACATTGAAGA	AAATACTAGA	CCTAAAAGAA	GCAGACCTAC	ATCGTTTGCA	180
GATGAGCTGG	CTGCCCGCAT	CAAGGGGGAT	GCCATGGGTC	GAGTGGACGA	GGAGCCGACA	240
ACCTTACCCT	CAGGAGAAGC	AAAACCTCGG	AAGACACTCA	AAGAGAAGAA	GGAAAGGAGA	300
ACTCCTTCAG	ACGAGTCTTC	ATCATCCAAA	CCTGGAAAGA	AAATCCCAGC	AGCTCTCGAG	360

## (2) INFORMATION FOR SEQ ID NO:919:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:919:

GAATTCGGCC	AAAGAGGCCT	AGTGCTATTG	AAACATTGGT	AACAGCAATT	TCTTTAATTA	60
AACAATCCAA	AGTCTCTGCA	GATGATCGTT	GCAAAGTTCT	TATTAGCTCT	CTGCAGGATT	120
GCCTTCATGG	AATCGAGTCC	AAGTCCTATG	GGTCTGGATC	CAGACGTGAA	CGATCAAGAG	180
AACGGGACCA	TAGTAGATCA	CGGGAAAAGA	GTCGTCGCCA	TAAATCTCGG	AGTAGAGATC	240
GCCACGATGA	CTATTACAGA	GAGAGAAGCA	GAGGTCTGAG			279

## (2) INFORMATION FOR SEQ ID NO:920:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:920:

GAATTCGGCC	TTCATGGCCT	ACAGAACTTG	AAGCCATCAA	TAAAAGAGTA	AAAGACACTA	60
TGGCACGATC	AGAAGATTTG	GACAATTCCA	TTGATAAAAC	AGAAGCTGGA	ATTAAGGAGC	120
TTCAGAAGAG	TATGGAGCGC	TGGAAAAATA	TGGAAAAAGA	ACATATGGAT	GCTATAAATC	180
ATGATACTAA	AGAACTGGAA	AAGATGACAA	ATCGGCAAGG	CATGCTATTG	AAGAAGAAAG	240
AAGAGTGTAT	GAAGAAAATT	CGAGAACTTG	GATCACTTCC	CCAGGAAGCA	TTTGAAAAGT	300
ACCAGACACT	GAGCCTCAAA	CAGTTGTTTC	GAAAACCTGA	GCAGTGCAAC	ACAGAATTAA	360
AGAAGTACAG	CCATGTTAAC	AAAAAGGCTT	TGGATCAGTT	TGTAAATTTT	TCCGAGCAGA	420
AAGAAAAGTT	AATAAAGCGT	CAAGAAGAGT	TAGATAGGGG	CCCACTCGAG		470

## (2) INFORMATION FOR SEQ ID NO:921:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:921:



GAATTCGGCC	TTCATGGCCT	AGCAGTGGCG	TTGGAAGGAG	ACGCGGAGGG	GCAGTGGCGT	60
TGGAAGGAGA	AACGGAGGGG	CAGTGGCGTT	GGAACGGGGG	CAGTGGCGTC	GGAAGGGGAC	120
GCGGAGGGGC	AGTGGCGTTG	GAAGGAGAGA	CCAGGGCCGC	GGGGCTGCTT	CTTGTAAGG	180
GCCAAGCTGT	GAGGACTTCG	GGCTTTGCGG	CCGCTTTTGT	CTATGTCCCA	TCTCCTTCTT	240
TGTTTTGTTT	TTCTCAAACC	CTTTAAAAAC	GTGAAAACCA	TTTCTAGCTT	GGGGGCCCTA	300
TAAAAATAGG	CCTCGCTGGC	CCTAGTTTGA	TGACCCTTGA	AACAGACAAAT	TCAAGGAGAA	360
GCTTAGTGAA	AGAGTCACTT	ATAGCTTCAT	AAAAATAAGA	GAAGATATAG	TATCCATAAA	420
ATAATAATAA	GATTGTATCC	ATGAGGTTCC	TCGAG			455

## (2) INFORMATION FOR SEQ ID NO:922:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:922:

GACATGACCC	TGGACAAAGA	ACAAATAGCG	AAGGATTTGC	TTTCAGGGGA	AGAAGAGGAA	60
GAGACGCAAT	CATCTGCTGA	CGACCTCACC	CCGTCCGTGA	CCTCCACGA	GGCCTCCGAC	120
CTCTTCCCTA	ACCGGAGTGG	ATCTCGTTTC	CTGGCTGATG	AAGACAGAGA	GCCTGGCTCT	180
TCTGCCTCCT	CCGACACCGA	GGAGGACTCT	CTTCCTGCCA	ACAAATGTAA	GAAGGAGATC	240
ATGGTGGGAC	CTCAGTTCCA	AGCTGACCTC	AGCAACCTGC	ACTTGAACCG	GCACTGTGAG	300
AAGATCTACG	AGAACGAAGA	CAAGCTACTC	GAG			333

## (2) INFORMATION FOR SEQ ID NO:923:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:923:

GAATTCGGCC	TTCATGGCCT	AAGCAGCCTT	TCACCAGGGC	TCCATCTGTG	AAGAGTCTCA	60
GCCATGACTT	TGAGCTGAGC	TTGGGAGAAG	TAAAGCAACT	GTTAAGGCCA	GCCCTTGCCC	120
CTCAGACCTG	CCATGAAAGG	AATGAGCCCT	AGACTGACTC	CTGCAGCACC	CCCGGGACAG	180
GCTGGGACCA	GCTGTTTGTC	TCCAGGTGTC	AGAGTCCCTC	CTCCTCCTCC	AACCTCTCCA	240
TTGAATTCTA	GACCTGCCTC	GAG				263

## (2) INFORMATION FOR SEQ ID NO:924:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:924:

```

ATTTTGGGGA CCAAGAACCT GTACAAGGAT TTGTGATGAA CTTTCCAAT GGGGAAATTA      60
TCGACATCTT CAAGCCAGTG CGCAAGCACT TTGATATGCC TCATGATATT GTTGCATCTG      120
AAGATGGGAC TGTGTACATT GGAGATGCTC ATACCAACAC CGTGTGGAAG TTCACCTTGA      180
CTGAGAAATT GGAACATCGA TCAGTTAAAA AGGCTGGCAT TGAGGTCCAG GAAATCAAAG      240
AAGCCGAGGC AGTTGTTGAA ACCAAAATGG AGAACAAACC CACCTCCTCA GAATTGCAGA      300
AGATGCAAGA GAAACAGAAA CTGATCAAAG AGCCAGGCTC GGGAGTGCCT GTTGTCTCTCA      360
TTACAACCCT TCTGTTATT CCGGTGGTTG TCCTGCTGGC CATTGCCATA TTTATTCGGT      420
GGAAAAATC AAGGGCCTTT GGAGCAGATT CTGAACACAA ACTCGAG                      467

```

## (2) INFORMATION FOR SEQ ID NO:925:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 310 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:925:

```

GCCATCCTCT GACAAAAGAA AGAATATGTA CTCAGGTGGA GAGAATGTTT AGATGAATGG      60
GGATACGCCC CATGATGGAG GTCACGAGG AGGAGGACAT GGGGATTGTG AAGAATTGCA      120
GCGAACTGGA CGGTTCTGTG GTGGACTAAT TAAAGACATA AAGAGGAAAG CGCCATTTT      180
TGCCAGTGAT TTTTATGATG CTTTAAATAT TCAAGCTCTT TCGGCAATTC TCTTCATTTA      240
TCTGGCAACT GTAAC TAATG CTATCACTTT TGGAGGACTG CTTGGGGATG CCACTGACAA      300
CATGCTCGAG                      310

```

## (2) INFORMATION FOR SEQ ID NO:926:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 287 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:926:

```

GAATTCGGCC TTCATGGCCT AGTGGAGACC TGGCCAAGGT ACAGAGAGCT GTGTGCATGC      60
TGAGCAACAC CACAGCCATT GCTGAGGCCT GGGCTCGCCT GGACCACAAG TTTGACCTGA      120
TGTATGCCAA ACGTGCCTTT GTTCACTGGT ACGTTGGGGA GGGGATGGAG GAAGGTGAGT      180
TTTCAGAGGC CCGTGAGGAC ATGGCTGCCC TTGAGAAGGA TTATGAGGAG GTTGGTGTGG      240
ATTCTGTTGA AGGAGAGGGT GAGGAAGAAG GAGAGGAAAA CCTCGAG                      287

```

## (2) INFORMATION FOR SEQ ID NO:927:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 332 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:927:

```

CCGCGCACCA ACAACAGCAA CAACTCCACT GCGCCGGGCT GAGGAGCAGG AATTAGGAGC      60

```

```

TCGCGAATAA TATGAAAGGG ATCCGCAAAG GGGAAAGCCG AGCAAAGGAA TCCAAACCTT      120
GGGAGCCTGG CAAGCGAAGA TGCGCTAAAT GTGGCCGCCT AGACTTCATC CTGATGAAGA      180
AAATGGGGAT TAAAAGTGA TTTACGTTTT GGAACCTCGT CTTTTTATTG ACGGTGTCTT      240
GTGTGAAAGG TAGGTCTGCT TTGGGGGTCC CCTCCGCTTT GGATGGAGGT GGGCTGACTT      300
GTAGATGGAG AGAGGCTGGC AGCTTACTCG AG                                     332

```

## (2) INFORMATION FOR SEQ ID NO:928:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:928:

```

AGCCTGCCAT CCCAGGCTTC AGATTGGAGC CGATACTCAA GCAGCTTACT GGAATCCGTC      60
TCTGTTCCCTG GAACACTAAA TGAGGCTGTT GTAATGACTC CATTTTCATC GGAACTTCAA      120
GGAATTTCTAG AACAGACCCCT CCTGGAGCTG TCCAAAGGAA AGCCCTCCCC GCATCCCAGA      180
GCCTGGTTTG TGTCTCTTGA TGGAAAGCCA GTTGACACAAG TGAGGCACTC CTTTATAGAC      240
CTGAAAAAAGG GCAAGAGAAC CCAGAGCAAT GACACCACTC TGGACTCTGG GGTGGACATG      300
AATGAGCTTC ACTCAAGTAG AAAGCTCGAG                                     330

```

## (2) INFORMATION FOR SEQ ID NO:929:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:929:

```

GAATTCGGCC TTCATGGCCT AGTGAGTGGG TGATATCTGT AAAGTGCATT GTCTTCAGTT      60
GTAGGTGGGG TAGGTGTAAG GGAATGGCGG GGGGGCATGC AATATGGGTG AGGGAGGGCA      120
GTGCCCTTCT CATCCAGAC CTGAGCCCCC CCCAAACCT GTCTGGACTT TGATCAGGAT      180
AAGAACGTTG CAGGGCGAGG CAAGTTCCTG AAGCCGAAGA GGTCTGGGCT GGGGCCTACT      240
GGAGAAAGGG CATAGACTGG CTCGAG                                     266

```

## (2) INFORMATION FOR SEQ ID NO:930:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:930:

```

GCGAAATAA CCTTTTCTAA TGAGGATGTC TGATACTGTT ACTGTAAAAG ATGAACTGC      60
AACAAATGAAG GATTTGGAGG CAGAAGTGAA AGATACAACC AGAGTTGAAA ATCTTATCAA      120
ATCAGAAAAC TATGGGAAGA TTTTGGTAGA GAAGAATGAA CATTGTATTG AGAACAATAT      180
AGATTTGCAG GAGAAAATTC AGATCCAGTT AACACAATCA TTTGAGAAAG AAGAGAAGCC      240

```

CTCAAAAGAT GAAGCAGAAA AAGAAAAGGC CAGTGATAAG TTGCCCAGAA AAATGTTATC 300  
AAGAGATCCC AGTCTCGAG 319

## (2) INFORMATION FOR SEQ ID NO:931:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:931:

GAATTCGGCC TTCATGGCCT AAAGAAGAGC AGGAAGTCCA ATGTGGCCGA AGCAGAGTGA 60  
GCAAGGGCAG GAGTACCAGA GGAGGAGATA GGACGCCAAA GAGTTAAGAA AAGGAGGAAT 120  
GCAGAACCTT TCCATCAAAA ATAAATAAT ACATAACCAT GGTATGTGG GGTGGGGTTG 180  
TCTCTTTCTT TTGGAAAGAA GAAGGGCTTT CTGGGAATAG ATGCCCAGGC CAGGCAGCAA 240  
GCTGCTAAAC TCGAG 255

## (2) INFORMATION FOR SEQ ID NO:932:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 588 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:932:

GAATTCGGCC TTCATGGCCT AGCATTTCCT AAAATTCAGT GCAAGCGCCA GGCGATTGTG 60  
GTCTAAGGAT ACGATTTTGA ACCATATGGG CAGTGTACAA AATATGAAAC AACTGTTTCC 120  
ACAATTGCAC CTGATCAAGG AGCAGTGCTT CTCCATTGTG TTTGCAGAGA AATGTTTTTC 180  
ATTTCCCGTG TGTTTCCATT TCCTTCTGAA ATTCTGATT TATCCATTTT TTTAAGGCTC 240  
CTCTTTATCT CCTTTCTTAA GGCAGTGTG CTATGGCACT TTTCTATAAC CTTTTCATTC 300  
CTGTGTACAG TAGCTTAAAA TTGCAGTGAT TGAGCATAAC CTACTTGTTT GTATAAATTA 360  
TTGAAATCCA TTTGCACCCT GTAAGAATGG ACTTAAAAGT ACTGCTGGAC AGGCATGTGT 420  
GCTCAAAGTA CATTGATTGC TCAAATATAA GGAAATGGCC CAATGAACGT GGTGTGGGA 480  
GGGGAAAGAG GAAACAGAGC TAGTCAGATG TGAATTGTAT CTGTTGTAAT AAACATGTTA 540  
AAACAAACAA AAATTGTTAT TTTTCTTTTC CTTCGGTCAG AGCTCGAG 588

## (2) INFORMATION FOR SEQ ID NO:933:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 520 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:933:

GAATTCGGCC TTCATGGCCT AGGGGAAGGA AAGGCCCGTG TGGAGGAGCA TGGAGCCATC 60  
TGCTCATGAA GGAAAGGCAG GGATGGGGCA GAGGTGTTGG GGCTTCCGTG CGACTCCAGA 120  
GGCCAAGCCC AGAGCTGTGT GTGGAGCCCA TGAGGAGCAG AGATTTTCCA GCAAAGGTGC 180

ATTGTGTTGGGC	CTCCAGATGG	AGGCCCTACC	TTCTCAGCAA	GGGAAGAAAC	CCCTCTCTCT	240
TTGACCTCTC	TCCCTGCAC	AATTAGAAGG	TTCTGAAGAG	TGACTTCATT	ATTGGTGGGT	300
GAGTATATGT	TTATTGGGCA	TCTGTGGTGT	GCCAGATGTT	GTGTTGAGTG	CTGGGTGCAG	360
AGGTAAATGG	GATATCTGGT	TACCGCCAC	ATGGGGCTTA	TAGTGGGGGA	AGTGGGGGAG	420
TAAGTCAGGA	CACACGTAAG	CAAACGCTAG	AATGGATAGA	TATTGTGATT	AGAGCATTGG	480
AGAGAAAGAA	CAGGATGTTT	CAAGAAAGGA	CAGTCTCGAG			520

## (2) INFORMATION FOR SEQ ID NO:934:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:934:

GAATTCGGCC	TTTCATGGCCT	ACTTTTTTTC	TCAAGGTGCA	ATGAAAGCCT	TCCACACTTT	60
CTGTGTTGTC	CTTCTGGTGT	TTGGGAGTGT	CTCTGAAGCC	AAGTTTGATG	ATTTTGAGGA	120
TGAGGAGGAC	ATAGTAGAGT	ATGATGATAA	TGACTTCGCT	GAATTTGAGG	ATGTCATGGA	180
AGACTCTGTT	ACTGAATCTC	CTCAACGGGT	CATAATCACT	GAAGATGATG	AAGATGAGAC	240
CACTGGGGAG	TTTCTCGAG					259

## (2) INFORMATION FOR SEQ ID NO:935:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 413 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:935:

AACAAAATGA	AACAAACAAA	AGACAGAGGC	CAAGAAAGGC	TAAGTAACTT	GCCTAAGACT	60
ATATAATAAG	TCACAGGGCA	GGGAATAAAA	CTCAGTTTTC	CTGACTTCCA	TTAAGGTTGT	120
CTTTTCCTCA	CTCCACATTG	CCTGTCATTT	TTTTTCTGAT	TATTCTTAAG	AAGGAGTGAG	180
GAGAGAGAAT	AGAGAAACAG	ATTTTTTTCT	CGGACTATCT	TTTCTGTAGG	GAAAAACCAC	240
TGAAGCCCTA	TTAGCCTGGA	AGCTGCTTAT	AGGGTTACAA	TACTGTGTGT	CCTGCAGAAC	300
CTGTGAAGCT	CTTCTGTATT	TTCTGGACTT	TCCTGGAAAG	TCATTTAGAT	ATAATGTAAT	360
AAATATAATA	AAGTAGTTTA	GATATAATGA	GGTTTTCAAT	AGGCTTCCTC	GAG	413

## (2) INFORMATION FOR SEQ ID NO:936:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:936:

GAATTCGGCC	TTTCATGGCCT	ACCCTGAGAG	TAAGCCAAAA	AAGGAAGAAA	AAAATATGGA	60
AGTAAATATG	AAAGAGTGGA	TTTTACGATA	TGCTGAACAA	CAAAATGAAG	AAGAAAAGAA	120

TGAGAATTCT	AAAAGTTTAG	AAGAGGAGGA	AAAATTTGAC	CCTAATGAAA	GGTACTTACA	180
TCTTGACGCA	AACTGCTGG	ATGCAAAAGA	ACAAGCAGCT	ACCTTTAAAC	TAGAAAAAAA	240
CAAGCAGGGC	CGTCTCGAG					259

## (2) INFORMATION FOR SEQ ID NO:937:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:937:

GCGAAACCGT	GGTCAGCTGC	AAGAAGGCAC	AGGAGAACAT	GAAGCAAAGG	CACGAGAACG	60
AAACGCACAC	CTTAGAAAAA	CAAATAAGTG	ACCTTAAAAA	TGAAATTGCT	GAACCTCAGG	120
GGCAAGCAGC	AGTGCTCAAG	GAGGCACATC	ATGAGGCCAC	TTGCAGGCAT	GAGGAGGAGA	180
AAAAACAAC	GCAAGTGAAG	CTTGAGGAGG	AAAAGACTCA	CCTGCAGGAG	AAGCTGAGGC	240
TGCAACATAA	GAGGGAGCTC	GAG				263

## (2) INFORMATION FOR SEQ ID NO:938:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:938:

GAATTCGGCT	TCATGGCCTA	TTCCACTACT	AGGCTGACAT	GCAAAATCCT	AAGAGAAGTC	60
AGTCTTCCAG	GATTGATCCT	GGCATTGTGT	CTTGCTGTTC	CCCGTGCCTG	GAGCACCTGT	120
CCCAGCTCCC	CTGTGGCTGG	CTCCTTCTCA	CCATCCAGGG	TTCACTCCAA	ATATCTCCTT	180
CAAAGAGAGA	TCTTCCAGGG	TCACCTAATC	CAGAGAGTGC	CCTCTATGGT	TGCCACATCC	240
CCCCGACCCA	CCACCCACCA	CCCCCACTT	CAACTCCTTT	ATGGCACCTG	CCCCTCCCTG	300
AAATTCTCAC	TGTTGCTTAT	TTGTTATCTA	GCCCTCTCAT	CAGAATGTAG	ATCCACTGGT	360
GACAGGGGAC	TTGTGTGCCT	CGAG				384

## (2) INFORMATION FOR SEQ ID NO:939:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:939:

GAATTCGGCC	TCCATGGCCT	AGTTGTGTTT	TTTGGGCTTG	CTATTAATGC	AAACTCTGAT	60
TGCAAATGGA	TGTCATGTTT	CATACCTTTT	TTATCAGGAA	AAAAGCAGCA	AGCCTTCAGG	120
TGTTCCAGTG	ATGCCTGACA	CAATTGAGCT	GGACTTTATG	CTGCTCTTTA	CAGTAAGAGG	180
TGTTGCATTG	TATGTGGGGA	CTATGTGCAC	TGGCGTCTAA	GACAGTGACC	TCAACAATAT	240
TAGCTTTGCA	CAAACCCTCG	AG				262

## (2) INFORMATION FOR SEQ ID NO:940:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:940:

```

GAATTCGGCC TTCATGGCCT AGTGGAGGAC TGCTTTTGTG AACATGAGAA AGCAGCGCCT      60
GGTCCCTATG TATTTGGGTC TTATTTACAT CCTTCTTTAA GCCCAGTGGC TCCTCAGCAT      120
ACTCTTAAAC TAATCACTTA TGTTAAAAAG AACCAAAGA CTTTCTCCA TGGTGGGGTG      180
ACAGGTCCTA GAAGGACAAT GTGCATATTA CGACAAACAC AAAGAACTA TACCATAACC      240
CAAGGCTGAA AATAATGTAG AAAACTTTAT TTTGTTTCC AGTACAGAGC AGAACTCGAG      300

```

## (2) INFORMATION FOR SEQ ID NO:941:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 194 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:941:

```

GAATTCGGCC TTCATGGCCT AGTATATCTG AAAAGTACAC TGTGTTTGA AATTATAAAT      60
TTTCATTCTG AATGAGGTTT CTTTTTTTGA TTTTCTTTAA AAAAAAAAAA CAACCTGCTT      120
TGATTTGCTT TACATTCTT GCCCTCCATT TTTCTTATTA TATTGTAAAC ATTAGAAAAA      180
TGAACACCTT CGAG                                     194

```

## (2) INFORMATION FOR SEQ ID NO:942:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 581 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:942:

```

GAATTCGGCC TTCATGGCCT AGTGAGGATA AAGATAAGGA ACAGGCCAGG CACAGTAGCT      60
CACGCCTGTA ATCCCAGCAC TCTGAGAGGC CGAGGCAGGT GGATCACATG GGGCCAGGAG      120
TTTGAGACCA GCCTGGACAA CATGGTGAAA CCCCCTCTCT ACTAAAAATA GCCAGGTGTG      180
GTGGCACACA CCTGTAATCC TAGCTACTTG GGAGGCAAGG TGGGAAGTTT GTTTGAACCA      240
GGAGGCAGCG GTTGCACTGA GTCAAGATCA TGCCACTGCA CTCCAGCCTG GGTGACAGAG      300
TACGACTCTG TCCCAAAAAA AAAAAAAAAAG ATAAGGAACA GACCCAACCC GAATCCACAC      360
AACCTGACAC ACAGGAAAGT CTTGCCCATC CATCCACCTA CCTCCCCAAC CAGAGTAGTG      420
AAGCTATAAC CCCAGAGAGA TACCTTTGAT GTGAGCACTG TCCAGCATGG GCACCAAGGC      480
ATTCACCTGC TCCAGGAGTG CAACCTGGGA AAGGATAAAC TGCTCCTCTA AAGCAAAAAT      540
GGACAAGATA GTTGCACTGA AGCAAACCTG GGCATTGCTA G                                     581

```

## (2) INFORMATION FOR SEQ ID NO:943:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:943:

GAATTCGGCC	TTCATGGCCT	AAAACAGGCA	ACAATGACCT	TTTATTTTCT	GTTTGTCCCC	60
ACCTCCCCAG	CCTTCCACCT	CCTGTTCTTC	CTACCTTCTT	CCTTTTGTGAC	TAAATAATCC	120
CCACCTCCCT	TGATCATACA	GTGAGGCTAC	AGTGACTGAG	GGGAGAATCC	CCTCCTGTTC	180
ACTCTCCCAA	CCCTGCTCCA	GCCCCTCAGC	TTCCAGACC	CTCATGCAGT	TGGTTGTAAA	240
TTCTCCCGAGT	GAGCTCGAG					259

## (2) INFORMATION FOR SEQ ID NO:944:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:944:

GAATTCGGCC	TTCATGGCCT	AAAACCTCAC	GTGGCCTCTG	ATTTATTGT	GGGTGCATCC	60
ACAGGTGGCC	CGAGCTGTTC	TTTCAGCTGC	TCCAAGGATT	GAGACCCAAG	TCATCATGAA	120
AAAGGCCCAA	GTACAGTCTT	AATGCGATAA	ATCCACTAGC	TAAGACGTCG	AGTGCCAAGA	180
CCAGCCTTCC	AGCCGAGGTT	TGGACAAAGT	CTCAGGTTCC	CGTGA CT CAG	GGTAAGGTGC	240
TGGGGCTGCC	AGAGGACCTG	CCCCAGCAAG	ATTTTGTCA	AGAGCGAGAC	TCCATCAGCC	300
CAGGCAGACG	GGAGCAGGTT	CTTGCC CAGC	G TAGACAGCA	GCAAACAGCA	GCTCCTCGAG	360

## (2) INFORMATION FOR SEQ ID NO:945:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 206 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:945:

GAATTCGGCC	TTCATGGCCT	AGTGCAGGAG	ACGCCCTCAC	CGGAGATGGG	GACCGAGTCC	60
ACACGGCTCT	CACTGCAAAT	GCTTTGGGAA	AAACAAGACA	GTGTACTTTG	TGATCATATA	120
AAACAGCAAA	ATAAAATAGT	CGTGGGCACA	GGGCCAGTGA	TTCTGCAGTT	AGAGCCGTGT	180
GGACTCGGTC	CCCTCTCCGG	CTCGAG				206

## (2) INFORMATION FOR SEQ ID NO:946:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:946:

GAATTCGGCC TTCATGGCCT AGGTTCCCCG GCGTGGCATG GATGATGACA GAGGCCCTAG	60
ACGTGGTCCT GAGGAAGATA GGTTCTCTCG TCGTGGGGCA GACGATGACC GGCCTTCTCTG	120
GCGTAACACA GATGATGACA GGCCTCCCAG ACGAATTGCC GATGAAGACA GGGGAAACTG	180
GCGTCATGCG GATGATGACA GACCACCTAG ACGAGGACTG GATGAGGACA GAGGAAGCTG	240
GCGAACAGCT GATGAGGACA AAGGACCTCG AG	272

(2) INFORMATION FOR SEQ ID NO:947:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:947:

GTTTTGCTTA GATTTTGCTT TGGTTAGGTT GCGTTTTGGG GTTTGCCTTT TTTTGTGTC	60
GCTTAAATGC AATTTGGTTG TAAAGATTG ATTCTTTGT GTTCATCTGT TCCGCTTCTC	120
AGCGGTCCAT CTCAGCGTCT CCTTCAGGA ACCGCTGAGT GTCCTCTCTT AACATCCAAG	180
CCTTTTAATG AAATCGTACT GAAATCTGTA TCAGCTAAGA GTCCTCCAAT CCTGGTCCCA	240
TTAACTCCAA GTGCCTTTTT GACAGTGACA ACAGACAGTC CCTCGGCACT CGAG	294

(2) INFORMATION FOR SEQ ID NO:948:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:948:

GAATTAGAAT CTCTAAAGAA ACAGGAGGGA CTTCTTAAAA ATATTCAGGT CTCACATCAG	60
GAATTTTCAA AAATGAAACA ATCTAATAAT GAAGCTAACT TAAGAGAAGA AGTTTTGAAG	120
AATTTAGCTA CTGCATATGA CAACTTTGTT GAAGTTGTAG CTAATTTGAA GGAAGGCACA	180
AAGTTTACA ATGAGTTGAC TGAAATCCTG GTCAGGTTCC AGAACAAATG CAGTGATATA	240
GTTTTTGAC GGAAGACAGA AAGAGATGAA CTCTTAAAGG ACTTGCAACA AAGCATTGCC	300
AGAGAACCTA GTGCTCCTTC AATTCCTACA CTTGCGTATC AGTCCTCACC AGCAGGAGGA	360
CATGCACCAA CTCTTCCAAC TCCAGCGCCA AGAACCATGC CGCCTACTAA GCCCCAGCCC	420
CCAGCCAGGC CTCCACCACC TGTGCTTCCA GCGTATCTCG AG	462

(2) INFORMATION FOR SEQ ID NO:949:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 624 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:949:

```

GAATTTCGGCC TTCATGGCCT ACTCAAAGAG ACAACAAATA GCATGGTAGA ATCAATTAAA      60
CACTGCATTG TGTGCTGCA GATTGCCAAA AGTACTATTA ATCCCGTAGA TGCAATATAT      120
CAACCTAGTC CTTTGGAACC TGTGATCAGC ACAATGCCTT CCCAGACTGT GTTACCTCCA      180
GAACCTGTTC AGTTGTGTAA GTCAGAGCAG CGTCCATCTT CCCTACCACT TGGACCTGTG      240
TTGGCTACCT TGGGACATCA TCAGACTCCT ACACCAAATA GTACAGGCAG TGGCCATTCA      300
CCACCGAGTA GCAGTCTCAC TTCTCCAAGC CACGTGAACT TGTCTCCAAA TACAGTCCCA      360
GAGTTCTCTT ACTCCAGCAG TGAAGATGAA TTTTATGATG CTGATGAATT CCATCAAAGT      420
GGCTCATCCC CAAAGCGCTT AATAGATTCT TCTGGATCTG CCTCAGTCCT GACACACAGC      480
AGCTCGGGAA ATAGTCTAAA ACGCCCAGAT ACCACAGAAT CACTTAATTC TTCCTTGTCC      540
AATGGAACAA GTGATGCTGA CTTGTTGAT TCACATGATG ACAGAGATGA TGATGCGGAG      600
GCAGGGTCTG TGGTGAAGCT CGAG                                         624

```

## (2) INFORMATION FOR SEQ ID NO:950:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:950:

```

GATTCTAGAC CTGCCTCGAG CACGCTTGA GAAGCCCCGT CTCTACTAAA AATACAAAAT      60
TGGCCGGGCA TGGTGGCGCA TGCCTGTGGT CCCGGCTACT CTGGAGGCTG AGGCGGGAGA      120
ATCACTTGAG CCCAGGAGGT GGAGTTGAGG TGAGCCGAGA TCGTGCCATT GCACTCCGGC      180
CTGGGTGACA GAGTGCAACT CCGTCTCAA AAAAAAAAAA AAGCATTAC GTCAATCTCA      240
AGAGAACCCTG CTACTAATGC TTTCTTTGAT AGGCAGTATG ATAGGTTGGA AAGAATATAA      300
ACTGGGATCA AGCTTGGGTT CCACTTACCA GCTGTAGTAT GTTGAGCAAA TTATTTAATC      360
TAACACTCGA G                                         371

```

## (2) INFORMATION FOR SEQ ID NO:951:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:951:

```

GCGATTGAAT TCTAGGGTTT TTTT TTTT GGGATCCTGG GTAAAATTTT ATCCAAAAAA      60
CGGGATT TTTT TTTTAA AAAAGGAAAT TTGAATTCAA AATTTTGGGC AGCCCCGCT      120
TTTT TTTT TTTT TTTT TTTT TTTT TTGGTGGGTT CTGAGTCTTC      180
ACTTTATTAC TATGTCACCA GAAGTCACCA CCTTCACTTG GTTCACCACA GATGGATGGA      240
TGTCATAAAG GAGGTGCCA CGGGGCCACT GGATTCATC GAG                                         283

```

## (2) INFORMATION FOR SEQ ID NO:952:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:952:

GCTTGGCAGA	TGCTAACTTC	ATGGAAGATG	GTAATAGGAA	CAGATACTGC	TCTCTGCCCC	60
TGCTTCTTGG	ATTCTTCAGC	TCCTACCGCT	GATTCGGATT	ATCCCCTTTT	GACCCCTTTG	120
GGGATCCAGA	CTGCTGCCAG	GAGGCTGAGT	AGATACCTCA	GTTATCTGTA	TGTTATTTCT	180
GAGAGGCTTT	GGCGGATCCT	CTTCACTTGG	CATCCTGTGG	CATCCCTAGG	GTCTGGTGGT	240
AGCAGTAATA	GCAACAATGA	TATCTTACAT	CTGGAACAAC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:953:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 614 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:953:

GAATTCGGCC	TTCATGGCCT	AATTCTAGAC	CTGCCTGTCT	TGAGAGGAAC	CTTCCCTGTG	60
CTGGCTCCTG	TTGTTATCTG	TACCTAAGTT	ACTCAGTTCT	GAGTGCATGT	CTGGTAAATG	120
CTGGCCATTT	CTTTGAAGTT	CTGACTCAGA	ATCGGCCTCC	ATTAGAGAAC	TCAGTTCTCC	180
AAACCCAGTC	ATGATCTGCC	TTAAAATTGA	CCGAAGAGCC	ACTGATGATG	GCTCAACAAG	240
CTCATTCTCA	GAAATCCTAC	GAAGAGGAAC	TGTTATGGTA	CTAACATAGG	TTCGAATACC	300
TGACCGCTCT	AAACGAGAAA	TGGTTCGGCG	AAAGCCCCCA	CTATTGCTTT	CAATAGTGAC	360
TGTATTTTCT	GCTAGCCCTA	CTCTGGATCG	AGTTCTATTT	GCAATACTAT	CCCGATCTCT	420
ATTTTCTCCA	GGACGGATCC	TTCTCACTTG	AAGGTCCAGT	GTGATTGTTG	GATGTCGTCG	480
TACAGCAGTT	GAGGATCTGC	TGGATTCTTC	TCCTTCTTCT	ACTGTTATTG	TTGACACAAG	540
CCTTGAATTA	GAGAATGGGG	TATATGCAGT	ACCTCTGCGT	TCTCGTTTCT	TATCTTGCTC	600
TAAAAGACT	CGAG					614

(2) INFORMATION FOR SEQ ID NO:954:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:954:

GAATTCGGCC	TTCATGGCCT	ACAAGGATTT	CAGGATGTTC	TTCCTCTGGA	CTGCTCTGTT	60
CTGGGGTGGA	GTCATGTTTT	ACTTGCTGCT	CAAGAGATCC	GGGAGAGAAA	TCACTTGGA	120
GGACTTTGTC	AATAACTATC	TTTCAAAAGG	AGTAGTAGAC	AGATTGGAAG	TCGTCAACAA	180
GCGTTTGTG	CGAGTGACCT	TTACACCAGG	AAAACTCCT	GTTGATGGGC	AATACGTTTG	240
GTTTAATATT	GGCAGTGTGG	ACACCTTTGA	ACGGAATCTG	GAAACTTTAC	AGCAGGCGCT	300
CGAG						304

(2) INFORMATION FOR SEQ ID NO:955:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:955:

```
GAATTCGGCC TTCATGGCCT AGTAGCTATT AATCTGTGGC TATGAAATGA TCAGAAATGC      60
TAAGTGAGAT CAATATTTGT TTGGAACAAA AATCTTGGGA AACAAACCCAA GGGTTTTTCGC    120
TGTTGTTGTT TTTCTTTTTC TATTTTGTN  NACTTAGTCC TTTAGCTAGT GGATTTAATT    180
TTGTTGTGCC TGCTTCATTT TGCAATAACA ATGCAGTAGA ATTTAAAACT TGGACGCTCG    240
AG                                                                                   242
```

(2) INFORMATION FOR SEQ ID NO:956:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:956:

```
GCTGCGCTGT ACTTCAGATA CTTTTTCGA GGAACATTTG TGATTTGTGG CATAAAGTAA      60
CTGTCTAAAG GAAATCTTCT GAGAGGATCT GGTCAATTTA TGAAAGGGGC AATTAAGGGG    120
AAATGGAAGC AGATCTTTTA AAGAAGGAGC ATTTGAAATT AGCCCAGGAA TCATGTCCGG    180
CGAGTCCTGC TCTTTTGTAC CTGGGCATAA TAGTCAGCCA CACAGAGCTA GAGTTAGTTC    240
AAGAATTGTC TTCCTGATC GTGCTATATT TTTGGAACA CGCCGTACTC GAG                    293
```

(2) INFORMATION FOR SEQ ID NO:957:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:957:

```
GCAAAGAATG GTAACGTGCT TATCATGGGA GTGTTTGTAG AACTTAGCC AAAGCTTCAG      60
CAGAAAAATC CCCGAGAAAG ACCAGAGAGT TCTTACCAC AACAAATGTT CTGCTCATCC    120
CTCTCATCAA ACAAGGCCAT TTTGCAAGAG TTTTGATGGG AAATCACTAG GCATCCACCC    180
TACAGTCCTG GTTTGGCACC TTCTGACTTT TTGTTTCCTA ATCTTAAAAA AATTTTTCAG    240
GGCAACTCTC GAG                                                                                   253
```

(2) INFORMATION FOR SEQ ID NO:958:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:958:

```

GAATTCGGCC TTCATGGCCT ACAACATCAG CTCCTGTCTG GTTCTCCAGC TGCACGACCT      60
CAAAC TACAA CCTCAGCTCT TCCCCGAGTC TTCTGCTGCA TGACCCTCAA TCTAGAACAT      120
AAGCTCCTCT CTGGGTGTCC ACCTGTAGGG ACCTCAAATT AGAACGTCAG CTCCTCCCAG      180
AGTCTTCAGC TGCATGACCC TCAATCTTTA ACATCAGCTC CTCTCCAGGT CTGCAGCTCC      240
ATGACCCTAA AAATACATGA GCAGCTCCTC CCTGAATCTT CAGCTGTACG ACCCTCAAAC      300
TACAACATCA GCTCCTGTCT GCACCTCCAG CTGCAGGGCC CTCAAACTAG AATATCAGCT      360
CCTCCCCGAG TCTTCAGCTG CACGACCCTC AAACTAGAAC ATCAGCTCCT GTACAGATT      420
CCAAC TGTAG GGCCCTCAA CTAGAACATC AGCTCCTCCC CTCGAG      466

```

## (2) INFORMATION FOR SEQ ID NO:959:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 137 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:959:

```

GGAGCATGTC CTGTTATTTA TTAACTTTT CCATTTTCAT TTTTATTTG GGTAAGATAA      60
TTGCTTATGA TAAGCCTTGG GTGTGGAGAG CCGGTGCATA CAGAGTGGCG AGGCAAGCTT      120
CAATCTGCAG TCTCGAG      137

```

## (2) INFORMATION FOR SEQ ID NO:960:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:960:

```

GAATTCGGCC TTCATGGCCT AGAGCCGCGG CTCATGCGCG GTGCACAGAG GCTTGTTTCA      60
CATCTGTAAC AACAGGAGGA GGCCGAGCCT CGTGATGAGG AATAGCAAGG AGAGAATTCA      120
GCTCCAGTTC AAAAGCCTAC AAAATCTGAG ACTGTCAATTG CTTTATAAG GATTCCAGCT      180
TTCCCTCCTG GCCAGAAATG TTCAGCCTGG ACTCATTGAG AAAAGATCGG GCCCAGCACA      240
GGCAGCGTCA GTGCAAACTT CCCCCACCCC GCCTTCCACC CATGTGTGTC AACCTACCC      300
CAGAAGGAAC CCTCGAG      317

```

## (2) INFORMATION FOR SEQ ID NO:961:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:961:

```

GAATTCGGGC TTCATGGCCT ACTCTGCTCA ACCTGCACAT CACCCACCAC AGTCACCAGC      60
ACAAATTCAG ATGCAACTAC AGCACGAATT ACAACAGCAA GCCGCATTCT TTCAGCCTCA      120

```

GTTTCTAAAC	CCAGCCTTTT	TGCCTCATTT	TCCTATGGCC	CCAGAAGCAC	TGCTGCAGTT	180
TCAGCAGCCT	CAGTTTCTCT	TTCCATTTTA	TATACCTGGG	ACGGAGTTCA	GCTTGGGGCC	240
AGATTTGGGC	TTGCCAGGCT	CTGCCACATT	TGGGATGCCT	GGCATGACAG	GAATGGCTGG	300
CTCCTTGCTT	GAAGACCTAA	AGCAGCAGAT	TCAAACCCAA	CATCACGTTG	GTCAAACCTCA	360
ACTCCAGATA	CTACAGCAAC	AAGCACAACA	ATACCAAGCC	ACACAGCCCC	AGCTGCAGCC	420
TCAAAAACAA	CAGCAGCAGC	CACCACCTCC	ACAGCAACAA	CAAGCTCGAG		470

## (2) INFORMATION FOR SEQ ID NO:962:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 603 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:962:

GAATTCGGCC	TTCATGGCCT	AGGAGAANGA	CGTGCTGGTG	AACGTGAACC	TGGTGGATAA	60
GGAGCGGGCA	GANAAAAATG	TGGAGCTGCG	GAAGAAGAAG	CCTGACTACC	TGCCCTATGC	120
CGAGGACGAG	AGCGTGGACG	ACCTGGCGCA	GCAAAAACCT	CGCTCTATCC	TGTCCAAGTA	180
TGACGAAAAA	CTTGAAGGGG	AGCGGCCACA	TTCTTCCGCG	TTGGAGCAGG	GCGGCACGGC	240
TGATGGCCTG	CGGGAGCGGG	AGCTGGAGGA	GATCCGGGCC	AAGCTGCGGC	TGCAGGCTCA	300
GTCCCTGAGC	ACAGTGGGGC	CCCGGCTGGC	CTCCGAATAC	CTCACGCCTG	AGGAGATGGT	360
GACCTTTAAA	AAGACCAAGC	GGAGGGTGAA	GAAAATCCGC	AAGAAGGAGA	AGGAGGTAGT	420
AGTGCGGGCA	GATGACTTGC	TGCCTCTCGG	GGACCAGACT	CAGGATGGGG	ACTTTGTTTC	480
CAGACTGCGG	GGACGGGGTC	GCCGCCGAGT	GTCCGAAGTG	GAGGAGGAGA	AGGAGCCTGT	540
GCCTCAGCCC	CTGCCGTCGG	ACGACACCCG	AGTGGAGAAC	ATGGACATCA	GCACACTCTC	600
GAG						603

## (2) INFORMATION FOR SEQ ID NO:963:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:963:

GAATTCGGCC	TTCATGGCCT	ACAACAGCGT	TAGGTTTTTT	TTTTNGTTNG	TTNGTTNGTT	60
TNGTTTTTTT	CCAACCCTCT	TTCGGATGGA	CGGGGAAAGA	GAGAAAGAAA	AANCGAGGGA	120
AAATCNACAA	AATGTGCGAT	GCAAAGAGTC	GATTTTCGCG	GGGTTTGTCA	ACTTCGCCAC	180
TGCCGCACGC	GAATCGACGT	CGTCACGTGA	CGGTCTGCCT	CCGCCCTTAT	TAACCTCTCAG	240
CCCAGCGGCG	GTTTCCAGGA	CCTCAGACTT	TTTGCCGAGG	CGGCAGTCCC	TAGACGAAGC	300
GAAGGAGGCG	GCGCCTGCCC	CGCCACAAG	AGCTGCCGCG	CGCGGGTGTT	ATAGCTCCAC	360
CCCATCTGCA	AAGGAAGGGG	GAGCGGAAAG	AGCGGGATCT	AGCGGGGAAC	TCGAG	415

## (2) INFORMATION FOR SEQ ID NO:964:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:964:

GAATTCGGCC TTCATGGCCT AGCGGGTCTT CAGACAAGTG GAAAAGGTGA GAGAGGAGAT	60
CAGGGCGCAG AGCCCCGTGG AGGCTGAGTT TCCATATGGG CAACTGAGCA CATCCTGCCA	120
CTCCCACCTC GTGCCTCAGA ATNGACACCA GGCTACTCAT CTGGAGGTGA CCAAGCAGCC	180
AACCAATCGG GTCCCCTGGA GGTCTCAAA TGCCTCCCCA TACCTTGTTT CAGACCTCGA	240
G	241

## (2) INFORMATION FOR SEQ ID NO:965:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:965:

GAATTAATAG CCTGCAGGTT AATTACTCCC TGAAGGGTAT TGTGGAAAAG TATAACAAGA	60
TCAAGATCTC TCCCAAAATG CCAGTATGCA AAGGACACTT GGGGCAGCCT CTCAACATTT	120
TCTGCCTGAC TGATATGCAG CTGATTGTG GGATCTGTGC TACTCGTGGG GAGCACACCA	180
AACATGTCTT CTGTTCTATT GAAGATGCCT ATGCTCAGGA AAGGGATGCC TTTGAGTCCC	240
TCTTCCAGAG CTTTGAGACC TGGCGTCGGG GAGATGCTCT TTCTCGCTTG GATACCTTGG	300
AAACTAGTAA GAGGAAATCC CTACAGTTAC TGAATAAAGA TTCAGATAAA GTGAAGGAAT	360
TTTTTGAGAA GTTACAACAC AACTGGATC AAAAGAAGAA TGAAATTCTG TCTGACTTTG	420
AGACCATGAA ACTTGCTGTT ATGCAAGCAT ATGACCCAGA GATCAACAAA CTCAACACGC	480
TCGAG	485

## (2) INFORMATION FOR SEQ ID NO:966:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:966:

GAATTCGGCC TTCATGGCCT AACGGCTCCC TCACTTGTGA ATTAAAGTCA GAACTGCCG	60
TAAGGTTCTT CTGGTTCCTG CTTTGTGGAG AAAGCTTTCA GCAGCAATAT CTGGGATCAC	120
TGGTGATTA AATGTCAGGC CTCGCATCAT TATTCTGCC TGAGCTGATG GTAAACCGGG	180
CACCCAGCCT TTTAGCTTTC ATCCAGCACG AGGGAACCTG CCTTCAGATG TGACACGTAC	240
AAGTCAAAAA AGCTCAGAGT CAGCTCCAAC GTCTATTGGA TCCCACTCTA TCGCCTTTAA	300
AAAGGAAAAG AAAATCGAAA CGAACTCGAG	330

## (2) INFORMATION FOR SEQ ID NO:967:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:967:

GAATTCGGCC	TTCATGGCCT	AGGGTCGCAG	ACTCAAATGC	CCACAGGGGC	CAGGTTAGGT	60
TAGCGGCTGA	AGCAGTCTGG	GGAGAGGCAA	AAAGCAATGG	CAGGGAGGTG	GGACAGAGGA	120
ATGTGGGCCC	CAAACATATG	GGGCAGCTGC	TACTCAGTGC	CAGCTGTTTCG	TCGCCATGGG	180
GGGAAGCGGG	ACCAGAGCCG	CCGGGTCTTC	GGCTTTTTCA	AGAGGACGCA	TAACTCCGGA	240
TTGTTATTTG	AACTGTCCTG	ACTTTGGTAA	GACTCTGTGA	CGGTGACAGT	GAAGGAGGCC	300
GACTCATCGT	CAATTTCA	CAAGTACTCG	CCGGAGTCCT	CGAG		344

## (2) INFORMATION FOR SEQ ID NO:968:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:968:

GAATTCGGCC	TTCATGGCCT	AGGATGCAGC	CGAAAAGGAT	CGCAAGCTTC	AGGAGAAAGA	60
GAAGCAAATC	GAAGAGCTGA	AGAGGAAACT	GGAACAAGAG	CAGAAGCTCG	TGGAAGTGCT	120
GAAAATGCAA	CTTGAGGTTG	AAAAACGAGG	GCAAGCAGCAG	CGGCCCCCTGG	AAGCCCAGCC	180
CAGTGCCCCA	GGTCATTCTG	TCAAGTCAGA	TCAGAAGCAC	GGCAGCCTTG	GCTCCTCCAT	240
CAAAGATGAG	GCCTCACTCC	CTGACTGCTC	CAGCTCCAGG	CAGCCCATCC	CAGTAGCCAG	300
CCACGCTGTA	GGCCAGCCCC	TCTCTACAGG	TGGCCAGACC	CTTGTTGCCA	AAAAGGCTGT	360
AGTTATCAAG	CAAGAGGTCC	CTGTGGGCCA	GGCAGAGCAG	CAGAGTGTCT	TCTCGCAGTT	420
TTATGTGAGT	TCCAGGGGAC	AGCCACCGCC	TGCTGTTGTT	GCTCAGCCCC	AGGCTTTACT	480
GACCACGCAG	ACTGCTCAGC	TGCTGCTCCC	AGTGTCCATC	CAGGGCTCGA	G	531

## (2) INFORMATION FOR SEQ ID NO:969:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:969:

GTGCCTCGAG	AAACTGCCTA	TTCAGAAACA	CAGAAACACC	GAGACCTCAA	AATCCCCTGA	60
GAAGGACGTT	CCCATGGTAG	AAAAGAAGAG	CAAGAAACCC	AAGAAGAAAG	AGAAAAAACA	120
CAAAGAGAAA	GAGAGAGACA	AGGAGAAGAA	GAAGGAGAAG	GAGAAGAAGG	CTGAGGACCT	180
GGACTTCTGG	CTGTCTACCA	CCCCACCGCC	TGCCCCCGCC	CCCGCCCCCG	CCCCCGTTCC	240
ATCCACGGGG	GAGCTCAGTG	TGAACACTGT	CACTACCCCCG	AAGGACGAGT	GTGAGGACGC	300
CAAGACGGAG	GCGCAGGGCG	AGGAGGACGA	TGCCGAGGGG	CAAGACCAGG	ACAAGAAATC	360
TCCCAAGCCT	AAGAACAAGA	AGCTCGAG				388

## (2) INFORMATION FOR SEQ ID NO:970:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 365 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:970:

```
GAATTCGGCC TTCATGGCCT AGCTTACACT GGGCCAAGTG CTTGCCAAGG ATTCTCATGT      60
GACATTTCTT TCAGTCCTGC CGAGGACTTT ATGAGGGAAG CACCCTGTTT TACAGAGGGA      120
AGGGGGCCTA TGGGGTCTAC AGCAGTGAGA GCCTAGAGTT CAGTCTGCGT CTCTCTGATT      180
CCAAAGCCTG TGATTGTGAC TTCCATACTC TCCCTAAGAC ACATTCATAC ATTCAACTGA      240
ATATTTATTG AGCACCTACT GTGTGCTAGG GATAGAGCAG TAAATGAATC AGGCAAAAAT      300
TATTTACATT CCACTGGGGC TGACAAACCC AAACAAGGAA GAGGTGTAGT GCTTCGGGTC      360
TCGAG                                         365
```

(2) INFORMATION FOR SEQ ID NO:971:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:971:

```
GCAAAAGTAA TATGATTTGT TTAAAATACT CAGTCAACAG GTATTTCTTG AAAATATTTT      60
CCATAGAAAG TAGAATATGG TTCTCCCGAA TAAAACTGA TCCATTTTAC CTTTTTCTTT      120
CCCTTTTGTG TNNGGTATTT TTTTTTCTTT TTTTCTTTNN GCTTTTTTCC TTTAACTTTC      180
CAGCCAAAGG CTTCTATGAT CTTGATGCTT TAAATGAAGC TGCTTGGACA AGTGCCCCACA      240
GCCAGTTGGT TCCCTGTAAT GTTTGTGGGC GTACCTTCCT GCCAGACAGA CTGATTGTTC      300
ACCAACGATC TTGTAAACCC AAAGCTCTCG AG                                         332
```

(2) INFORMATION FOR SEQ ID NO:972:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:972:

```
GCGCCCTCAC CCCTCCAATC CCCCCTCTGA CCCCCTCTTC CTCACATGGG GTCGGGGGGCC      60
TGGGAGTTCA TTCTGGACCA GCCCACCTAT CTCATTTCCT TTTTATACAG ACTTTGAGAC      120
TTGCCATCAG CACAGCACAC AGCAGCACCC TTCCCTGAG GCCGGTGGGG AGGGGACAAG      180
TGTCAGCAGG ATTGGCGTGT GGGAAAGCTC TTGAGCTGGG CACTGGCCCC CCGGACGAGG      240
TGGCTGTGTG TTCACACACA CACACACCTC GAG                                         273
```

(2) INFORMATION FOR SEQ ID NO:973:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:973:

```

GAATTCGGCC TTCATGGCCT ACTCTGTCTC AAAAAAAAAAT AGTAAGTTGT GTAAAGAAAA    60
ATATTAATTA TATAATATGG CAGTTCCTAT GAGAGTGTGG CAAAAATCAA GAGGGCTTGG    120
AAGTTTTTTC TTTGCTCTTG CAACTGGCTG GATGCAGTTC ATATATTTTT CAACCAGTAG    180
GTGGCACCCC AACCTAATT TTTGCAATTG TAACCTGGTG GCAGAAGGGG CAGGACTGAT    240
GGCTTGGGCA AGACTGTTAT GCCAAGTTCT CGAG                                274

```

## (2) INFORMATION FOR SEQ ID NO:974:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:974:

```

GAATTCGGCC TTCATGGCCT AGTGAGATAG TACCAGATTT AGAATATAAT TTTATCTTTC    60
TTTAGCAACA AGCCCTAACA ATATCCAAAC TAAATAAAAT CATTACATGA ATTTACTTTT    120
TACAATCATT CTCCTAAGGC TCGAG                                145

```

## (2) INFORMATION FOR SEQ ID NO:975:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:975:

```

GAATTCGGCC TTCATGGCCT AGGAAATAAC AGTTATTTCA TCATAAAACA GTCCCTTCAA    60
ACACACAATT GTTCTGCTGA AGAGTTGTCA TCAACAATCC AATGCTCACC TATTCAGTTG    120
CTCTGTGGTC AGTGTGGCTG CATAGCAGTG GATTCCATGA AAGGAGTCAT TTTAGTGATG    180
AGCTGCCAGT CCATTCCCAG GCCAGGCTGT CGCTGGCCAT CCATTAGTC GATCATCTCG    240
AG                                242

```

## (2) INFORMATION FOR SEQ ID NO:976:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 116 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:976:

```

CATGTGCACA CTCGCACATG CACATATGGG CACGTGGGAA GACGGGAGAA GTACTGTCAA    60
AGTATAAGGA ACTGCAGAGG TTGGGATTTA CTGGAAGGGA AGGGAGCACA CTCGAG    116

```

## (2) INFORMATION FOR SEQ ID NO:977:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:977:

```

GAATTCGGCC TTCATGGCCT AGCATGGCAA CAGATATGTG GAGCATTGGA GTGTTAACAT      60
ATGTCATGCT TACAGGAATA TCACCTTCT TAGGCAATGA TAAACAAGAA ACATTCTTAA      120
ACATCTCACA GATGAATTTA AGTTATTCTG AGGAAGAATT TGATGTTTTG TCTGAGTCGG      180
CTGTTGATTT CATCAGGACA CTTTATGTTA AGAAACCTGA AGATCGAGCC ACTGCTGAAG      240
AATGTCTAAA GCACCCCTGG TTGACACAGA GCAGTATTCA AGAGCCTTCT TTCAGGATGG      300
AAAAGGCACT AGAAGAAGCA AATGCCCTCC AAGAAGGTCA TTCTGTGCCT GAAATTAATT      360
CGGATACCGA CAAATCAGAA ACCGAGGAAT CCATTGTAAC CGAAGAGTTA ATTGTAGTTA      420
CTTCATATAC TCTAGGACAA TGCAGACAGT CAGAACTCGA G                                461

```

## (2) INFORMATION FOR SEQ ID NO:978:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:978:

```

GAATTCGGCC AAAGAGGCCT AATGATGATG AATAAGTTGG TTCTAGCGCA GTTTTTTTTT      60
TTTCTGTGCT ATAAAGCATT TAACCCCCCT GTACACAAC TACTCGAG                      108

```

## (2) INFORMATION FOR SEQ ID NO:979:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:979:

```

GATGGCGTCG GGCAGCGGGA CAAAAAAGTT GGAAGTTGCG CGAAAGTGGG ACAAAGATGA      60
ATATGAGAAA CTCCCCGAGA AGAGGCTCAC GGAAGAGAGA GAAAAGAAAG ATGGAAAACC      120
AGTGCAGCCT GTCAAGCGAG AGCTTTTACG GCATAGGGAC TACAAGGTGG ACTTGGGAATC      180
CAAGCTTGGG AAGACAATTG TCATTACCAA GACAACCCCT CAATCTGAGA TGGGAGGATA      240
TTACTGCAAT GTCTGTGACT GTGTGGTGAA GGAAGTCCATC AACTTTCTGG ATCACATTAA      300
TGGAAGAAA CATCAGAGAA ACCTGGGCAT GTCTATGCGT GTGGAACGTT CCACCCCTGGA      360
TCAGGTGAAG AAACGTTTGG AGGTCAACAA GAAGAAGATG GAAGAGAAGC AGAAGGATTA      420
TGATTTTGAG GAAAGGATGA AGGAGCTCAG AGAAGAGGAG GAAAAGGCCA AAGCGTACAA      480
GAAAGAGAAA CAGAAGGAGC TCGAG                                505

```

## (2) INFORMATION FOR SEQ ID NO:980:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 314 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:980:

CGAGGGACAT GAGGCTGAGC TGGTTCCAGG TCCTGACAGT ACTGTCCATC TGCCTGAGCG	60
CCGTGGCCAC GGCCACGGGG GCCGAGGGCA AAAGGAAGCT GCAGATCGGG GTCAAGAAGC	120
GGGTGGACCA CTGTCCCATC AAATCGCGCA AAGGGGATNT CCTGCACATG CACTACACGG	180
GGAAGCTGGA AGATGGGACA GAGTTTGACA GCAGCCTGCC CCAGAACCAG CCCTTTGTCT	240
TCTCCCTTGG CACAGGCCAG GTCATCAAGG GCTGGGACCA GGGGCTGCTG GGGATGTGTG	300
AGGGGGACCT CGAG	314

(2) INFORMATION FOR SEQ ID NO:981:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 379 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:981:

GAATTCGGGC TTCATGGGNT ACTCATTGCT ACATTGCTAG TTGACCCGCA GTTATATTTT	60
CTTTTCTTCT TTTAATAAA AGGCAAGAGA AACAAATCCGT TTTTGCCTTT TCCTACCACA	120
TCTTTGACTT TTCTGATTCC TGCAAGTTTA AGTTAAAAAC ATCCTACCTT CAAGCTACAA	180
AATGCAGCAC ATCCCAGGAC ATCCCTCACC TGCTTTGCTT GTTTATTAGA CACAAGTGGC	240
TTTGTTTCTG AAGTTACTGG GAACCGCTAA GGATAGTCAA GGTGGAGAAC ACAGGGTGGG	300
GTCTCAGAGT CTGAGGCCTT GGTTCAGGTT CCTGATAACA TTAAATATAG AAAATACACA	360
GCACAAGGCC AAATCTGAG	379

(2) INFORMATION FOR SEQ ID NO:982:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 362 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:982:

GAATTCGGCC TTCATGGCCT AGAAGATGGT AAGGTTTCGAA TCTTTCGGGT GATGGGAGTT	60
AAGTGTGAAC AGGAACTGGG ATTTAAGGGC CAACTTTCAG GGGTATCCCA GGTCTGCTTT	120
CTCCCAGAAAT CCTATTTGCT GCTTACTGGA GGGAAATGATG GGAAGATCAC GTTGTGGGAT	180
GCAAACAGTG AAGTTGAGAA AAAACAGAAG AGTCCACAA AACGTACCCA CAGGAAGAAA	240
CCTAAAAGAG GAACTTGAC CAAGCAGGGT GGAAATACTA ACGCTTCAGT AACAGATGAG	300
GAAGAACATG GCAACATTTT ACCAAAGCTA AATATTGAAC ATGGAGAAAA AGTGAACTCG	360
AG	362

(2) INFORMATION FOR SEQ ID NO:983:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:983:

```
GAATTCGGCC TTCATGGCCT AGGCCACTGA TATTTTCTA AGTTAGCAAG GCTCACTTGC      60
TTGCTTTCTT GCCTCCCTTG CCTCCATCCC TCTCCCTTCC TACCTTCTCT ATTTACCTAT      120
TTCTCTCCCT CCCTCTCTTC TCCTCTCTTT TTTTTCCTCC CGCATATGCA GCTTTTGTGAT      180
TGTACTTGAT TTTATAGAGA CTGCACAGTT CCAGCAAGAT TGGGAGTCAG GCATGGAGCA      240
GGCATCTCAG GCTACCAGAA AGAATTGGTC ACCTAGACTT TCAGTCAGGC ATCCTCGTTT      300
GCATTGTCCT GTAAGTCAAT TAGTTGATAA ATAGTTCCTCC CTCATCCCT TAAGTTTGT      360
TTTTGTTTTT GTTTTAAATA TAGGTAAGTG GGACTCTACC TAAAATTTTG CATCATACTT      420
ATGGGTAATA TCTTTTTCAT ATATTATTA TCAAAGTATG AAGTIGAGTA TTTGCTTGT      480
ACCATTTCAA TTCTGCATTA TAGTAGTTCA TTGTATAACT GAAAGAAATG ATTTCTTCAT      540
AAGTGACATT AAATATGAAC ATTCATCTCT CGAG                                574
```

(2) INFORMATION FOR SEQ ID NO:984:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:984:

```
GAATTCGGCC TTCATGGCCT ACGATTGAAT TCTAGACCTG CCCCCTCCCT CCATGCCTCA      60
TCCCCCGCCC CCTCCAGTCA TGCCGCAGCA GGTTAATTAT CAGTACCCCTC CGGGCTATTC      120
TCACCACAAC TTCCACCTC CCAGTTTTAA TAGTTTCCAG AACAACCCTA GTTCTTTCCT      180
GCCCAGTGCT AATAACAGCA GTAGTCCTCA TTTCAGACAT CTCCCTCCAT ACCCACTCCC      240
AAAGGCTCCC AGTGAGAGAA AGTCCCCACT CGAG                                274
```

(2) INFORMATION FOR SEQ ID NO:985:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:985:

```
GAATTCGGCC TTCATGGCCT AGATAAGGAG ACTTCAGAAG AGAAGCCGCC AGCTGAGGGA      60
AGTGAGGACC CTAAGAAGCC ACCCCGCCCT CAGGAGGGAA CAAGATCTAG CCAGCGAGAT      120
CAGATACTCT ATCTCTTTGG GAGAACTGGC CGAGAAAAAG AGGAATGGTT TAGGAGATTT      180
ATTCTGGCAT CTAAGCTAAA GTCGGAAATC AAGAAGTCAT CGGGTGTCTC TGGAGGTAAA      240
CCAGGGCTTT TGCCTGCACA CAGCAGACAC AACAGTCCGT CCGGGCACCT GACCCACAGC      300
CGCAGCAGCA GCAAAGGCAG TGTGGAGGAG ATCATGTCAC AGCCAAAGCA GAGGGAGCTA      360
CTCGAG                                366
```

(2) INFORMATION FOR SEQ ID NO:986:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:986:

```

GAATTCGGCC TTCATGGCCT ACTCTCTTCC AACCAAAAGT CTTAATATGG GAATATCCCT      60
CACACGATC CTAATACTGT CAGTAGCTGT CCTGCTGTCC ACAGCAGCCC CTCCGAGCTG      120
CCGTGAGTGT TATCAGTCTT TGCCTACAG AGGGGAGATG CAACAATACT TTACTTACCA      180
TACTCATATA GAAAGATCCT GTTATGGAAA CTTAATCGAG GAATGTGTTG AATCAGGAAA      240
GAGTTATTAT AAAGTAAAGA ATCTAGGAGT ATGTGGCAGT CGTAATGGGG CTATTTGCCC      300
CAGAGGGAAG CAGTGGCTTT GCTTCACCAA AATTGGACAA TGGGGAGTAA AACTCAGGT      360
GCTTGAGGAC ATAAAGAGAG AACAGATTAT AGCCAAAGCC AAAGCCTCAA AACCAACAAC      420
TCCCCCTGAA AATCGCCCGC AGCATCTCGA G                                     451

```

## (2) INFORMATION FOR SEQ ID NO:987:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:987:

```

GAATTCGGCC TTCATGGCCT AGAGAACTG AGCAAAAATA GCTGCCAAGA GAAGAGGGAA      60
CGAGTGCTCG GGGCGGGTTG GAGGCAGATA ACGAGAAGGC AAGAAAATTC TTTGTCTTTG      120
GCTCCTGCTG TCAGCTCAGA GGGGTCTCTT TGAGATGAAA AAGAAAAGTC CCCAGCCTTG      180
GGGAAGGAAA GGAGAGGGTG CCCCACGCAG ATATGAAGCA AAGCCATTGG CAAGATATTC      240
TCTCTAAGGA GAGCAGCGGT CTTGCCAAAG GCATCTTCTA TTGTGTATTG CCGTCATAAA      300
CCCTACCCTT CCATGTAGAT AGCCAGGACT CGAG                                     334

```

## (2) INFORMATION FOR SEQ ID NO:988:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:988:

```

GAATTCGGCC TTCATGGCCT AAGAGAAACA AAAATGATTT TGCTTTCCTA GCTTGGTTTG      60
TGGCGTCTCC CTCGCAGAGC CCTTCTCGTT TCTTTTTTAA ACTAATCACC ATATTGTAAA      120
TTTCAGGGTT TTTTTTTTGG TTTAAGCTGA CTCTTTGCTC TAATTTTGGA AAAAAAGAAA      180
TGTGAAGGGT CAACTCCAAC GTATGTGGTT ATCTGTGAAA GTTGACAGC GTGGCTTTTC      240
CTAAACTGGT GTTTTTCCCC CGCAATTGGT GGATTTTTAT TATTATTCAA AAACAAAATG      300
AAAAGTTTAT TTACTTTTTT TTTCTGAAA TGCTGACAAT ATGTGATATC TTAATATCTG      360
TAATTCCTTAG TGAAAGTTAT GGTATAGTAT AGGTGAAGCT GTAGTGTTTA TATCAATAGA      420
TGTGAATTCA AATGAGCAAT CTAATAATTA TTTACTATTC AATTATGTGA ATTTCTTCTC      480
CTTTGTCTCC CATTGTATCT GCACTCGAG                                     509

```

## (2) INFORMATION FOR SEQ ID NO:989:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:989:

```

GAATTCGGCC TTCATGGCCT AGGCTTGTGG GCAGGGCCCG TGCAGGTCAT GGAGCCGGTA      60
GCATCTCAGA GCTGGACAGA GGAGGTAGGC TGGGAGCAGG CCCGTTGGG GACCAGTGGC      120
CCCTGCACAG GAGCCAGAGG GCCTGGGCAG CTGTCTGTCC AGAAAGCATG CAAGACCCCG      180
TGCCACCCGG GCACACAGGG CTGTCGTGTC TAGAAAGAGA TCTCCTGGGG TCACGGGCAG      240
GCAAAGCTGA TTGATTTTGG CCGTGAAGTT TGACCTTGTG ATGGAAACCG AGCTCCCAGG      300
GAGTGAGACA AACTGCCTCC CCGTGTCACT GGCCAATAAA CCTGACTTGG TTTTACAGCC      360
CCGAGAAATT GCTCACTAAT AGCCAGACAG ATGCTCCCCC TGCCTCGAG      409

```

## (2) INFORMATION FOR SEQ ID NO:990:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 210 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:990:

```

GAATTCGGCC TCATGGCCTA CCCAAATCTG AAGTCTTTGG ATATGTTACT GCTGAAGTTT      60
CTATCACTTC TCACTCCTGG TTCCTTGTTT CCCTGTATGC TTTTTTTTTT TTTCCATGAG      120
TTCACCTTTT TAAATTATAG TTCTTCAAGG CCTAGGATGC AGGTGTGTTT TTCCATAAAG      180
GGCTATTTTG CCTCTGCCGA GGTCTCGAG      210

```

## (2) INFORMATION FOR SEQ ID NO:991:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:991:

```

GAATTCGGCC TTCATGGCCT AGTAGATAGT ACAAATTC AAGATATCA AAGTGTGTTA      60
AGTTTACCTT TCCACCCACT TTCTCATTTT TGTCTCCCC AGTTCCCTTT GCATTATTCC      120
ACGTATATTC TGTGCATATA TACATTCATA TACATTTATC TGTATGTGTC AGCTTCTTTT      180
TACACAAATG ATACATAAAC ACTGTTCTGG ACCTTCCAAC TTAGAATTAC TGCAAACAGT      240
GTCGTGATGA ATTACCTAAT TCTGTGTATG TGTGTATATT GGTAGAAAAA ATTCCCGGAA      300
GTAGAATTGC TAGAACAAAG ATTTATGCAT TTTAAATATT CCTTTATTAT AAAACTAATG      360
AAAGTAAACA TGTTGGCTAT GACCACGTAT GCTCTATGCT CAGTTTTTCT AGAGTTGTGT      420
ATGCTTAATA TAGGAGCCTG CCTCGAG      447

```

## (2) INFORMATION FOR SEQ ID NO:992:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:992:

```

GAATTCGGCC TTCATGGCCT AGCCCATGTG TGTATTATTT GAATTAATTT CAAGCTTACA      60
GAAGAATTAT AAGAATTATA CAAAGAGCCC TTGTATAGCC TTCATCCAGA TTCCTCATTA      120
ATAGTTATCT CCCCCACACA CGTAATGCAC AGACACTGCA TGCATTTTCC TTTTCTTTT      180
TCTCTTCTTT CTTTCTTTT TTCTCTCTTT CCCTTTCTCT TCTCCCTCCC CTCCCCACCC      240
CTCCCTCCC  TTCCTCTCCC TTCCCTCTCT CCTACTTCAG CCTCTAGAAT AACTAGACTC      300
GAG                                         303

```

## (2) INFORMATION FOR SEQ ID NO:993:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:993:

```

GAATTCGGCC TTCATGGCCT AGGATTGGT AGGGTAACTT GAAACTGAG TTAAATGAGA      60
AAGGTAGAAA AAATTCGTAC TTTTCTCTCT CCCCACAAAA AATAAAAAACA GTAAATCTT      120
TACCAACTGA AAAAGCTGTT GAAATTTTCT GTATGTTAAA AAAATGAGCT TTGCAGTAAC      180
TCTTAAAATC ACCTAGCAAA ATAGGAACTA TAATGTGCAT CTTTCCTTCA CTAAAACATT      240
TATTGCATCT CTTCTTGATG CTGATGATTG AGGACACACA TTCTGCTTTC CTGGGGCTTA      300
TGGTTTTATA TAAAACCAA AGCAAAGTAG AAAGTATACC TCCTACCAAG GGGCTCGAG      359

```

## (2) INFORMATION FOR SEQ ID NO:994:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:994:

```

GAATTCGGCC TTCGGCCTTC ATGGCCTAGA GGAGGACCAA GGCTTCAAAG GCCCCTGCCC      60
GCGGTCCTG CAGGTTCCCA TTGTCCGTGT TAATAGCCTC AGATGGGCAT CAGTTGCCCT      120
GATGGGCTTG GGCTCCACGC CCGGGCTTGC ATGTTTGCCA AAATTACTCA AGAGCATTTT      180
TTTTTTTTTT CTTTGAGACT CCGTCTCAAA AAAAAAAAAA AAAGAGATCC TCAGCTGTTG      240
TTTCTTGAAT CAGATATTG GATCACTCTA GCATCCAATC ATGCAGCTCC TAAATATGCT      300
CCTAAATCAT GCAGGTCCAA TCACGCACCT GTTTTACGGT TTATCAATTT GTGCTCATCC      360
TGAATAAAT AAACAAATCC ATGAGCCAAC TGCAGCACCA CTCGAG                     406

```

## (2) INFORMATION FOR SEQ ID NO:995:

## (i) SEQUENCE CHARACTERISTICS:



(A) LENGTH: 603 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:995:

```
GAATTCGGCC TTCATGGCCT ACCATCTTGG AACCTCCTCC CATGATTGCC TTATTATTTT    60
AAATACATTA ATGTAGATCA ATGAAGAATA AGAAAATAAG CAATTTTATT TTACCTTAAT    120
TTATTCTGTT TCTGATGCTC TTTGTCTCTC TATGTAGGTC TGACTTTTGG ACCTACATTA    180
TTTTCTTTCC CTCCTAGGAA TTTTAAAAG CATTCTTGT AAGGCAGGGC TACTGAAAAC    240
AAATTTCTCT AATATTTGCT TGTCTACAAA AGTCTTTATT TCTCCTTTAC CTTTAAAGGG    300
AAATTTTACA ACCTACAGAA TTCTAGGTG GTGGGTTTTT TCCCCCTCAA TCCCTTAAGT    360
ATTTAATTCC TCTCTTCTTG CTGTCATGGT TTGTAAGGAA GAGTCAGATG TAATTTTAT    420
CTTTGCTTCT GTATGGGTAG GGTGCTTTT CTCTAGATT TTTTTCAG AGTTTTCAG    480
TTATCTTTG ATTTCTGTA CTTCAAATAT ATTATGCCCA GGTATAGATT GTTTTGTGTT    540
CTGTTTTGT TTTCATTTGG CATTTGTCT GCTTGGTGT CTCTGAGCT CCCGATCTC    600
GAG                                                                    603
```

(2) INFORMATION FOR SEQ ID NO:996:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 461 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:996:

```
GAATTCGGCC TTCATGGCCT ACAGAGAATG AAACATGGAG CTCACATTCT GATGGGGGAG    60
AAATAAAAAT CATATCAGAT GGTGATGAGC TTTTCGGTTT TCTATTTCTA TTTATGAAGA    120
ATAAAAATAAG GTAATAGAGA TAATGTGATG AAAATTCTAA CATTCTCTAC CTTTCCTGAA    180
TTCTTAATCT ATACCTTCTG TTCTTACATT TTCTACTTAA TTTTATTTAA TACAACTGT    240
AGCTAAACTT TTATTTTCT TTTCACTCTG ATTCTTAACC CCTATCCATG CTAATTTTGT    300
CCTTCACTAT TCCACAAAAC TTACCCACTG TCGTATTATT ATCTTCTATT AAAAGCCAGT    360
ATTCTCTTTT CAGTTTTTAT CCTTCTTGAT CTACACTGAA CATGATTGCC TTTCTCTCTC    420
TTATATCACT TGCTGCTATC TGCAGTCCAA CTAGCCTCGA G                                                                    461
```

(2) INFORMATION FOR SEQ ID NO:997:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 470 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:997:

```
GAATTCGGCC TTCATGGCCT AGTGATTGG GTACAGACAC AGCCAAACCA TATCATTACA    60
GATATAAATC TCTGAGTAAA TCCGGTGTGTT GATTCTTCT AGCTTTTGT CTTATGAGTA    120
GAGGTCTTTC TCCTCTACTC CAAGAAATTT CATAGACACA CCACTTAGTA CTTACGTTTA    180
CCACCATTGT TATTATTTT AAGAATGTAC TACTTTATAT TTTTAAACAT GAAGGACTAG    240
CTCAAATTT TGTAGCTTCC CCCCCGCCC CAATCTTTT TTTTTTTGT ACTCCTTTGT    300
```

GATGGGTAGT	GGTTTAAAGA	CAGCAAAACA	TGACCTTAAC	CAGAACACTA	ACTAGCTTTA	360
TACATAATTC	AGCCTATGAA	CATGTATCTG	GCAAGAGAAA	TTCTTGATCT	GTGGTTCCGC	420
AGATCCATGA	GAGCTGCTTC	TCCGGATTTT	CTTGCTGGC	CCCTCTCGAG		470

## (2) INFORMATION FOR SEQ ID NO:998:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 350 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:998:

TTTAAAGAGA	GTTGCGTTAT	TTTCTCCAAA	AGCATTTGTT	GAGTTGGTCA	TTTGACAGT	60
TAACGTGTCG	TTTTTACCTG	CATTCTAGG	TGCTAAACT	TACAAGTGTA	TCTCTGAAC	120
ACAGGCATTG	ATCCTCTACC	AATGAATAAT	TGAGAGAGGT	AGGAATGACT	GATTTTCTA	180
GTTGTAGTTT	GAAAGATTAA	TTTGATGAAT	TGGAAAGTAT	GGAACTATT	CTGTTACTAT	240
TGCAAAGAAA	GATTTATTTT	TTTAAAAAAT	TTATTTTAT	TTATTTTATT	TTATTTTTTT	300
GGGCAGGTCT	GGCTCTGTCA	CCCAGGCTGG	AGTGCAGTGG	CAGACTCGAG		350

## (2) INFORMATION FOR SEQ ID NO:999:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 266 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:999:

GGAGTATTGT	TACAATCACA	TTTGAAGTAC	CAGGAAATGC	AAAGGAAGAA	CATCTTAATA	60
TGTTTATTCA	GAATCTCCTG	TGGGAAAAGA	ATGTGAGAAA	CAAGGACAAT	CACTGCATGG	120
AGGTCATAAG	GCTGAAGGGA	TTGGTGTCAA	TCAAAGACAA	ATCACAACAA	GTGATTGTCC	180
AGGGTGTCCA	TGAGCTCTAT	GATCTGGAGG	AGACTCCAGT	GAGCTGGAAG	GATGACACTG	240
AGAGAACAAA	TCCATTGGTC	CTCGAG				266

## (2) INFORMATION FOR SEQ ID NO:1000:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 309 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1000:

GTAATGGGAG	ATGGACATCC	ACTGTTTCAT	AAGAAGAAGG	GGAACAGAAA	GAAGCTAGTA	60
GAGCTGGAGG	TGGAGTGCAT	GGAAGAGCCT	AATCACCTTG	ATGTGGACCT	GGAGACCCGG	120
ATCCCTGTCA	TCAATAAGGT	GGATGGTACT	TTGCTGGTGG	GTGAGGATGC	CCCTCGCCGG	180
GCTGAAGTGG	AGATGTGGTT	ACAGGGTCAT	CCAGAGTTTG	CTGTTGATCC	CCGATTCTTA	240
GCGTATATGG	AGGATCGCAG	AAAACAGAAG	TGGCAAAGAT	GTAAAAAAA	TAATAAGGCA	300
GGACTCGAG						309

## (2) INFORMATION FOR SEQ ID NO:1001:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1001:

```

CACGTCAGGA GAATAGAATG GAAAATTTT ATTCAACAG AAAGAAGTTA ATTTAGAAAA      60
TTAGTTTAAA ATACATTGGA AAACCTAAAG AGCAAAAAGC ATTTGTAAAC AAACAAAAAA      120
TAAACCAAAA AAACCCTGAT GAGGTACTA CTAATAGTAA CTGTAGGAGG CATCTACCTC      180
CCTAGATTGG GGAAAGAAGT AGTGGTTGAA TTATCAGAAC CTAGAAGCAC AGAACAGGGG      240
CCCCTCAGAA TGTGTTCTCA GACTCCTGAG GGAAGGATGC TACCCAGCTA CAGCTGGTTC      300
CTCGAG                                         306

```

## (2) INFORMATION FOR SEQ ID NO:1002:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 541 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1002:

```

GAATTCGGCC TTCATGGCCT ACACCCTGCT AATTTTGTG TTTTTTTTG TAAAGGCTGG      60
GTCTCACTAT GTTGCCCAGG CAGGGTCTCG CTATGTTGCC CAAGTGGGTC TCGAACTCCT      120
GGGTTCAAGC AATCCTGCCT CGGCCCTCCA AAGGGCTGGG ATTACATGCA TGAGCCATCA      180
CATCTGGCCC CCACCCATCT TAAAAGTCAG AAATAAAAAGC CAGAGCCCCT CCTTGACCTC      240
CTGGCCCCCT CCGCTTTATC ACCCCACCTC TCTGCTGTC TTTATTGCAA AACCCCCAGA      300
AGGTTATCAG GCTCATGGTC TTCCCTCCTG TCCACACTGC CCCAACTACA CAATGAGATG      360
CCCCCATTC AACTCCCCAG CCTCCTCTGC TGGCGTCTCC TCCTTCCTAA TCTCTGAACA      420
TTGTCCCATC CAAGGGCTCA GTCCCAGGTC CGTTCACCCC TTGTCCACAC TCACCCTGAG      480
AGCTTCCAGT CTGTGGCCTC CATGCCCTGG AATGAGCCCC TGTAAGATCC ACAATCTCGA      540
G                                         541

```

## (2) INFORMATION FOR SEQ ID NO:1003:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 602 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1003:

```

GAAACGCCTC CTGATTTTGT CTTACAATGG AACTTAAAAA GTCGCCTGAC GGTGGATGGG      60
GCTGGGTGAT TGTGTTTGTC TCCTTCCTTA CTCAGTTTTC GTGTTACGGA TCCCCACTAG      120
CTGTTGGAGT CCTGTACATA GAATGGCTGG ATGCCTTTGG TGAAGGAAAA GGAAAAACAG      180
CCTGGGTTGG ATCCCTGGCA AGTGGAGTTG GCTTGCTTGC AAGTCCTGTC TGCAGTCTCT      240
GTGTCTCATC TTTTGGAGCA AGACCTGTCA CAATCTTCAG TGGCTTCATG GTGGCTGGAG      300

```

```

GCCTGATGTT GAGCAGTTTT GCTCCCAATA TCTACTTTCT GTTTTTTTCC TATGGCATTG      360
TTGTAGGTCT TGGATGTGGT TTATTATACA CTGCAACAGT GACCATTACG TGCCAGTATT      420
TTGACGATCG CCGAGGCCTA GCGCTTGGCC TGATTTCAAC AGGTTCAAGC GTTGGCCTTT      480
TCATATATGC TGCTCTGCAG AGGATGCTGG TTGAGTTCTA TGGACTGGAT GGATGCTTGC      540
TGATTGTGGG TGCTTTAGCT TTAAATATAT TAGCCTGTGG CAGTCTGATG CGACCCCTCG      600
AG                                                                                   602

```

## (2) INFORMATION FOR SEQ ID NO:1004:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 378 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1004:

```

GCGGCAATGA TACCCACTGC CAACCAACAA AAATTGGCTG CAACCATCCC CTACCAGGAC      60
CGAGCCCCTA CAGGTGAGCG GCTCTGCCAG GCCCTGGCTC CTGCCCCGAT GCACCCAAGC      120
CGGAGCCTGG GGCAGCTCCT ACGAGGCTCA CCAGGGCCCC AGCAGGATGC CTGGGTCCCC      180
TGCTCCTGCT TGGCCAAAGG GAAGAGGAAG CAGCAGGCAG GGGCTGGGGA GGCCTTCATG      240
AATTACATGA ATTATCCTTC TTTTTTTTTT TTTCCCTTT TTTTTTTTTT TTTTTTTTTT      300
TTTTTTTTTT TTTTTTTTTT TGAGANNCCA NTTNAAAAAA AAAAGGGGGG GGTGTCAGGG      360
TTTCATTCAG AGCTCGAG                                                                 378

```

## (2) INFORMATION FOR SEQ ID NO:1005:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 208 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1005:

```

GAATTCGGCC TTCATGGCCT ACTGTTTTAT TTCCCGCTTT TATTTTGCTT TTGAAATCTT      60
TTTCCTTGGT GGATTGTAC GTGTCTTAC TAGATGCCTC AAATTAAGTC TGACCACAAT      120
CCTACTCTAC TTTCTACAGT GGAGAGACCA TCCTCCCTGC CCCAGGGCTG TCTCCACCCA      180
CCCCCCTTC CCCACCCGCA CCCTCGAG                                                                 208

```

## (2) INFORMATION FOR SEQ ID NO:1006:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 396 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1006:

```

CTGATCTGTG AACCTTACAC GAGCAAGGAA TTATTCCGGG TTTTGGATAC ACCCTACTTA      60
CTAAATGAAG ACTGGGAATA CTATCTCTCT GGGAAGCTAT TTAATAAATC AAAAATGAAG      120
CTCACTTTTG AACAAAGTTA CAGTGACTGC AAAAAAATA GAGGCACTTA CGGCACTCTT      180

```

CACCTGCAGA ACAGCTTCAA TATCAGTGAA CATCTCAACA TTAATGAGCA TACTGGAAGC	240
ATAAGCAGTG AATTGGAAAG TCTGAAGGTA AATCTTAATA TCTTTCTGTT GGGTGCAGCA	300
GGAAGAAAAA ACCTTCAGGA TTTTGCTGCT TGTGGAATAG ACAGAATGAA TTATGACAGC	360
TACTTGGCTC AGACTGGTAA ATCCCCCGCT CTCGAG	396

## (2) INFORMATION FOR SEQ ID NO:1007:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1007:

GAATTCGGCC TTCATGGCCT AGATGGGGGC TAGTTTTTGT CATGTGAGAA GAAGCAGGCC	60
GGATGTCAGA GGGGTGCCTT GGGTAACCTC TGGGACTCAG AAGTGAAAGG GGGCTATTCC	120
TAGTTTTATT GCTATAGCCA TTATGATTAT TAATGATGAG TATTGATTGG TAGTATTGGT	180
TATGGTTCAT TGTCCGAGA GTATATTGTT GAAGAGGATA GCTATTAGAA GGATTATGGA	240
TGCGGTTGCT TCGGTGAGGA AATACTTGAT GGCAGCTTCT GTAGCTCGAG	290

## (2) INFORMATION FOR SEQ ID NO:1008:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1008:

GTGGTTCTGA AATCACCCCTT CCTTTTCACT CCTCTGCCCT GACTTCCTCT CTCACCATGC	60
TCTCCTGCTC TCCACCTTCA CCCTCTTCAG TGGGATTCTT GCATTTTCAGC CAGAGGGACC	120
TGTCTGCAGC TACCAGATGC TCCCCACCCT GGGAGAGCTC AGCGGCATGT CTGCACATGG	180
GCCTTTTCAG CCTTCTTCAT CCGCAATTG GAACTGACTT TCCCCTCTCC ATCTCACACT	240
TGAGAATCTC TGTTCCTTGT TTCTTGTTTT TTATTTTATT TTTATTTTTT CTCCCCCTG	300
GCGGACTCGA G	311

## (2) INFORMATION FOR SEQ ID NO:1009:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1009:

GGANCAGAGT CCAANAGATN AATTATATTC AGAAAACCTCT GTTCAAGATA GGGTATGATT	60
ACAAATTGGA ACAGATCAAA AAGGGATATG ATGCACCTCT TTGCAATCTG TTACTGTTTA	120
AAAAGGTCAA GGCCCTGCTG GGAGGGAATG TCCGCATGAT GCTGTCTGGA GGGGCCCCGC	180
TATCTCCTCA GACACACCGA TTCATGAATG TCTGCTTCTG CTGCCCAATT GGCCAGGGTT	240
ATGGACTGAC AGAATCATGT GGTGCTGGGA CAGTTACTGA AGTAACTGAC TATACTACTG	300

GCAGAGTTGG AGCACCTCTT ATTTGCTGTG AAATTAAGCT AAAAGACTGG CAAGAAGGCG 360  
GTTNTACAAT TAATGACAAG CCAAACCTCGA G 391

## (2) INFORMATION FOR SEQ ID NO:1010:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1010:

GGGGAAGAAA GGCCTAAGGA TGGTGAAGCT GAACAGTAAC CCCAGCGAGA AGGGAACCAA 60  
GCCGCCTTCA GTTGAGGATG GCTTCCAGAC CGTCCCTCTC ATCACTCCCT TGGAGGTAA 120  
TCACTTACAG CTGCCTGCTC CAGAAAAGGT GATTGTGAAG ACAAGAACGG AATATCAGCC 180  
GGAACAGAAG AACAAAGGGA AGTTCCGGGT GCCGAAAATC GCTGAATTGA CGGTCACCAT 240  
CCTTGTCAGC CTGGCCCTAG CTTTCCTTGC GTGCATCGTG TTCCTGGTGG TTTACAAAGC 300  
CTTCACCTAT GATCACAGCT GCCCAGAGGG ATTCGTCTAT AAGCACAAAC GCTGTATCCC 360  
AGCCTCCCTG GATGCTTACT ACTCCTCCCA GGACCCCAAT CCCAGAAGCC TCGAG 415

## (2) INFORMATION FOR SEQ ID NO:1011:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1011:

GCCAGACTAC CACAAGCCCC ACCCACAATA TGCCAAGCCC TACCCATACC ACAGCAAGCC 60  
CCACTCATAC TTCCACAAGC CCCACCCATA CCCCACAAG TCCCACCCAC AAAACCAGTA 120  
TGTCACCTCC CACCACTACA AGTCCTACCC CCAGTGGTAT GGGCCTAGTC CAGACTGCCA 180  
CAAGTCCAC CCATCCTACC ACAAGCCCCA CCCATCCAC CACAAGCCCC ATCCTTATAA 240  
ATGTAAGCCC TTCACTTCT CTAGAAGTTG CTACCTCTC CAGCCCTCC AAACACTCAG 300  
ACCCACCCCT CCCAGGCACT GACTCCCTC CCGTAGTCC CCCAGTCTCC AATTCCTACA 360  
CTCAGGCAGA CCCTATGGCC CCCAGAACTC CCCACCCAAG TCTCGAG 407

## (2) INFORMATION FOR SEQ ID NO:1012:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1012:

GAATTCGGCC TTCATGGCCT ACGCCGCCGC CACAATGGGC CGCGGAGTTT GGGAACTGA 60  
CGCGGATGCG GCATGTGATC AGCTACAGCT TGTCACCGTT CGAGCAGCGC GCCTATCCGC 120  
ACGTCTTCAC TAAAGGAATC CCAATGTTT TCGCCGCAT TCGGGAGTCT TTCTTTTCGC 180  
TGGTGCCGCA GTTTGTAGTG TTTTATCTTA TCTACACATG GGGGACTGAA GAGTTCGAGA 240

GATCCAAGAG GAAGAATCCC GCTGACCATT GAATTCTAGA CCTGCCTCGA G

291

(2) INFORMATION FOR SEQ ID NO:1013:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1013:

GAATTCGGCT TCATGGCCTA TGGATTACCT GAGGAAGAAG AGATCAAGGA AAAAAAACC	60
ACCAAGTCAAG GAAAGTCAAG TAGCAAGAAG GAAATGTCTA AAAGAGATGG CAAGGAGAAA	120
AAAGACAGAG GAGTGACGAG GTTTCAGGAA AATGCCAGTG AAGGGAAGGC CCCTGCAGAA	180
GACGTCTTTA AGAAGCCCCCT GCCTCCTACT GTGAAGAAGG AAGAGAGTCC CCCTCCACCT	240
AAAGTGGTAA ACCCACTGAT CGGCCTCTTG GGTGAATATG GAGGAGACAG TGACTATGAG	300
GAGGAAGAAG AGGAGGAACA GACCCCTCCC CCACAGCCCC GGCAGCTCGA G	351

(2) INFORMATION FOR SEQ ID NO:1014:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 596 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1014:

GCTCGAGTCG GATCCTCCCT GAATGTGGAG CGATGGGGGG TTGCACACAG GCCGTTCTGC	60
CCCAGCAGCT AACAAGAAAG ACCCTTGCAAT TCCTCCCTGC ATCTCTCCCT TTTGGGTCTC	120
ACTAATGTCT GTTGAATTTC TCTTTTTC AAAGCAAAAT CCTTCTCTGC ATTTGTCTCTG	180
CTTGTCTGTT TCCCAGAGCC GCAGGACTCT CTCCTTGTCT GGAGTTCCAG AGAGCCCCCA	240
CTTTCTCTTT CTAAGCTGTG TTGTGTGTTT CCTGGTACAT TCTAGGTTCC CCAAAGATAA	300
ACATGACTAA GGATTGGAAA GGAGGAAAGG CCGCGCAGAT TGTTAATCTG AAAGTCAATC	360
CCCGGATTTA GCTCTCAAAA ATGCTTTTAT TTTGGAGAAA AGCAATAGAG TAAGACAGAA	420
GGACTTAACG CTTGCAGGGA AGTGGCTTTC TGCCATGTAG AGCCAGGCTG GCAACCTGCC	480
CTCTGCCATC AGGGAGTGAG CATGAACCTG GAAACCTCTA GGACGCAAGA GCGAGGCTGG	540
CTGTCCCCTC GTGTGCAGTG CTTAGACCTT CTTGCCACAC ATCCCATCCC CTCGAG	596

(2) INFORMATION FOR SEQ ID NO:1015:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1015:

GAATTCGGCC TTCATGGCCT ACTTGGTTTT GCTGACCAAC AAATATGCAT AGTGTCTATT	60
CACAGTTATA CAGTAATAGG TTAGAACAGA AATAAATGCC AGCTTCTTAT GATGCCTTTG	120
CCAACAATCA GGCCATGTGT TTCAGGACCC TTCCTTCCTC TGACTTGTGT AGCATTACAC	180

CTCAGCACAC GACTTCTTGA AAGAGTGAAC CTCCAGGGCT TGCTCTCTCA GATGCACCTG	240
GGCAGCAGCA GGAAGTGTCT GACAGTCTCT CCTGTCTCCA TAAAGTAGCG GGCTGGCTCT	300
TTGCTGGGAG TGATGGGAGC CACAGATACG TGCATGGAAG TTACTGCCTC GAG	353

## (2) INFORMATION FOR SEQ ID NO:1016:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 300 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1016:

GAATTCGGCC TTCATGGCCT AATTATTAAG TAAAATAAGG GTTCCTTGAA TATAGGCACT	60
GCAAAATACCA TGACAGTGAT CTGATCACTG AGCTAACTAC TGAGTGACTC AGAGGCAGGT	120
GATGTATACT GTGTGGAGTG GAATGGTGAG AGATTTTCATC ACACTACTCA GAATTGCATG	180
AAACTTAAAG CTTATAAATT GTTTAATTCT GGAATTTTTC ACTTAATATT TTCTGACTGA	240
GATTGCCCCAC GGGTAACTGA AACTGTGGAA AGCGAAACTG CAGATAATGG CGGACTCGAG	300

## (2) INFORMATION FOR SEQ ID NO:1017:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 491 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1017:

GCGATTGAAT TCTAGACCTG CTCGATCTCA TGGGGCAGAT GAAATTCTCT TCCTTAGAGG	60
AAAGGGAAAG GTGAGGCCCC AGAGGACTTA TCTCAGCTGT ACATGCTCTG CCTGTGGAGA	120
CATGGCTTTT CTTTGTGCTG TGGCAGACTG GGGCTTTTGA AGTGGTGTAT GTTTAACTTA	180
CCTGAGAGTG AGAGATGTGT AGGAAGAATA GCTGGAAGAA AGTGAAAGAT GAGTGCCAGT	240
ACTTTTGGCC TGTTATCCAG TAGAGAGAAA GTGACAGTGA AAGTAACGTG AGAGAGAAAG	300
AGTGTGTGTG TATATGTGAG AGAGAGAAAG AAAGAGAAAG GAATGCTTGA TTGCTTGTG	360
TTCAGTGGGC CAGCTCTGAA ATCCAAAATC ATGCCTTGAT AACATTACAA AACCGTGATC	420
CTGGGTTTGA GTGAATCCTA GAGACATTGT TCTTATGGCC GCCTGGTTTC CGCAGCATGA	480
TCACCCTCGA G	491

## (2) INFORMATION FOR SEQ ID NO:1018:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 323 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1018:

GCTTTTCCAT GAAAGGTGGA TCGAGATCTA CTGCCAGTGG GTCAACAGGT TCTAAATTGA	60
AATCAGATGA GTTACAGACC ATCAAGAAAG AATTAACCCA GATCAAACT AAAATTGACT	120
CCTTGCTAGG GCGCCTGGAG AAGATTGAGA AACAGCAGAA GCGGAGGCA GAAGCTCAGA	180



AGAAGCAATT GGAAGAGAGT CTAGTGCTGA TCCAAGAGGA ATGTGTGTCA GAGATTGCAG	240
ATCACTCTAC AGAGGAGCCT GCTGAAGGAG GGCCAGATGC CGATGGAGAA GAGATGACAG	300
ATGGGATAGA GGTGGACTC GAG	323

## (2) INFORMATION FOR SEQ ID NO:1019:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1019:

GGTCACAATC TCCTTGCACT CCAGGACTGG GCATACTCAT ATGCCTTCTG TGGTTGGCGT	60
CCTTGATTTT ACCCAGTTTT GGTCTGGTT TCCTCTTCA CACTTCCTGT CATTGGCTTA	120
TACCCCTACC TGTGTCATTG GCCTTAACAA GGACTTAAAG ATGCCGAAAG TTCAGTATAA	180
ATCGAACTGT AAACCATCCA CATTGTCATA TCCTGCCCCCT CTGGAAGTAC CAAAAGAAAA	240
AGAAAAGGAA AAGGTTCTA CTGCTGTATT ATCTATAACT GCCAAGGCTA AAAAGAAGGA	300
AAAAGAAAAG GAACTCGAG	319

## (2) INFORMATION FOR SEQ ID NO:1020:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1020:

GCGGGCATGG TGTGTAGCCT ATGGGTGCTG CTCCTGGTGT CTTCACTTCT GGCTCTGGAA	60
GAGGTATTGC TGGACACCAC CGGAGAGACA TCTGAGATTG GCTGGCTCAC CTACCCACCA	120
GGGGGTGGG ACGAGGTGAG TGTCTGGAC GACCAGCGAC GCCTGACTCG GACCTTTGAG	180
GCATGTCATG TGGCAGGGGC CCCTCCAGGC ACCGGGCAGG ACAATTGGTT GCAGACACAC	240
TTTGTGGAGC GGC CGGGGC CCAGAGGGCG CACATTCGAC TCCACTTCTC TGTGCGGGCA	300
TGCTCCAGCC TGGGTGTGAG CGGCGGCACC TGCCGGGAGA CCTTCACCCT TTACTACCGT	360
CAGGCTGAGG AGCCCGACAG CCCTGACAGC GTTTCCTCCT GGCACCTCAA ACGCTGGACC	420
AAGGTGGACA CAATTGCAGC AAGACTCGAG	450

## (2) INFORMATION FOR SEQ ID NO:1021:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1021:

GAATTCGGCC TTCATGGCCT ACTAGACCTG CTTTTTGGAA GAGAATGCTT TTCACCTGTT	60
CTTTTTTTAA TCCACCTGGC ACTTTCCTCA GGACCCAAAC TTGTTCACTC TGCTGCTTCT	120
TGATSTATCA ATTTTGGGAC ATCACCTGTT GTCTCCTTGC TGTGAATGAT GAGGATTTGG	180

CCCATATTAC CCCCGTTCCT TCCCCGGTCA TTCTCTCGGT TGCCTTTGTC ACTTTAAATC 240  
 ATTTACATAA ACCACAACCTT CTCGAG 266

(2) INFORMATION FOR SEQ ID NO:1022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1022:

GAATTCGGCC TTCATGCCTA AGAACTTAT TCGTCTTCAG CATGAGAATA AGATGTTAAA 60  
 GCTTAACCAA GAAGGTTTCGG ACAATGAAAA AATAGCCTTA TTGCAGAGCC TTCTAGATGA 120  
 TGCAAATCTA CGCAAGAATG AACTGGAGAC AGAGAATAGG CTGGTGAATC AAAGACTTCT 180  
 GGAAGTACAG TCACAAGTTG AAGAATTACA AAAATCTTTA CAGGATCAAG GCTCAAAGC 240  
 AGAAGATGCT ATTTCACTCC TTCTAAAAAA GAAGCTTGAA GAACATCTAG AGAAGCTGCA 300  
 TGAGGCCAAT AATGAACCTAC AGAAGAAGAG AGCCATTATT GAAGATCTCG AG 352

(2) INFORMATION FOR SEQ ID NO:1023:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1023:

GAATTCGGCC TTCATGGCCT ACAAAGCCA CCAGGTGAAT AAATGCCATT TTCTTTTTCG 60  
 CTAGACATTG TTCATTTACT GAAAATGAAC AAGGTAATGC TCAGCATACA AAAAAAAT 120  
 AAAGTTCTCA AGATCCCAGT CTTTCTGGAT TCCTCTGTAT TTATCACTCA AGTCATCCCC 180  
 CTTTTTGTA TCTCGCTTTT TGTCTCGCT TTATTAAAT CCTTTATATC ACTACCCCCA 240  
 TCTCTCGAG 249

(2) INFORMATION FOR SEQ ID NO:1024:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1024:

GAATTCGGCC TTCATGGCCT ACAGGAAATA GGCAAAAATA CCCAGGAAAA GGAAACAGTT 60  
 TTATGCATTA GTGCTGTACC TTCTTCATAT TGTCAAAAAT AAAAGATAGT AGAGATTTAT 120  
 TGAAACATT TTAAATAAAG AAGTTGTGTT CATAATATAA AGCTGCCTTA AACTATATAT 180  
 GAAAAAACT GTAAATCATA GAAAATAACT TTATCAAAGA TGTAAATAA TACATTTTAC 240  
 AGAATAATTT CCCATGGGCT TCTCGAG 267

(2) INFORMATION FOR SEQ ID NO:1025:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 232 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1025:

```
GAATTCGGCC TTCATGGCCT AGCCATCTTA TTGAACTAT ATTTTCCTT CAAAGAAGCA      60
ATAGGTCTCA ACATAGTGTA GGTAGCATCA GGTGACAGAA AGCCAATTTT ATTTTCAAAT      120
TTAAGTTAAT TATCTTCGTG ATCCTATTTA TCCACAATT CTTTCAGAAA AGACTGAAAA      180
AACACATTAT ATTCAGGAGA TATAATGAAA TTATTGGAAG GCATCACTCG AG              232
```

(2) INFORMATION FOR SEQ ID NO:1026:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 153 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1026:

```
GAATTCGGCC TTCATGGCCT AGATTGAATT AGACCTGCCT CGAGCCCCTA AAAATATCCT      60
AAATGCATTT CCTCCTCTGC ATTCTAACTA CTGCTGCCCT TGTTCTAGGA CTCCACTCTC      120
CCACATCAAC CAACTTTTCT CCTTGGCCCC CTC                                  153
```

(2) INFORMATION FOR SEQ ID NO:1027:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 294 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1027:

```
GCGAGGGCCA GGGAGGGAGG AAGCAATAAA TAGGGGGAGA AAATGGCAAT AAGACGTTAT      60
ATAGCCCTTC TAACAAAAAT ACCAGAAGGG AGGGGTGAGG GACAAGGCTG TCTGAGGGAG      120
GGCAGGAGGT GAGGCCATGG CTGGGTCTCT TTTGCGCTTG GATGGCCGTC AGCTCAGCAT      180
GAGGCATCTG AAAGAACTAC CCAGATTGCA GAAGAGAGAG GTCCCAGCCT CCTTGGGAAGG      240
ACATGATGGG GGAGGAGTGG AGACAACAGC TGAGTGTTAC CTGTAAAACT CGAG              294
```

(2) INFORMATION FOR SEQ ID NO:1028:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 285 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1028:

GAATTCGGCC	TTCATGGCCT	ACACACATAC	CCAACACACA	CACAGACACA	CACATACACA	60
GAATCAACAC	TCAACACGCA	AACACCCAAC	ACACACATGC	ACACACACTT	TCTGAAGATG	120
AGTTTTCTCA	TTTATGAAAT	GAGCTCATCT	GGACTTGCCA	TGAGGGTCCA	ACAGGTGCCA	180
TGCAATCAGG	TGTGCACTCA	GTATGGGCTG	GGTGGAGATG	GCCATCTCCT	TTCCCGTCCA	240
GGCCTGGTTC	CTGTGTGCTG	GGCCTCTGCT	CTTCCCCCCC	TCGAG		285

## (2) INFORMATION FOR SEQ ID NO:1029:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1029:

GACAAGCTGA	GAAATGAAA	GGAAACTAG	AAGAATGTG	TAATCAGTTA	CATCGCAGTC	60
AAGAGGAGGA	AGGAACACAA	AGAAAGGCCT	TGGAAGCCCA	AAATGAAATA	CATACCAAAG	120
AGAAGGAGAA	GCTGATTGAT	AAGATTCAAG	AAATGCAGGA	GGCCAGTGAC	CACTTGAAGA	180
AACAATTTGA	AACTGAAAGT	GAAGTCAAGT	GTAACCTCCG	GCAGGAAGCA	TCCCGGCTCA	240
CTTTGGAAAA	CAGGGAATC	GAG				263

## (2) INFORMATION FOR SEQ ID NO:1030:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1030:

GAATTCGGCC	TTCATGGCCT	ACCTCCTACA	AATTTAATTT	TTTTATGAAA	TTTTTAGGTG	60
ACTTGTAAT	TCTTCATGTA	TGAGGAGTTG	TGTTTATTAA	TGCTACTTTT	TAAATTTTCC	120
TGTGCCATGT	GGCAGATGTT	TATTCTCTTA	ATGCACCTCA	GGTTTGCTAT	CTGTAAAGCC	180
TTTGACCCAG	GCCTACTGAG	TCAAATCTAC	ATTCAGTGTA	ACATTAAAGG	CAGAAACCTC	240
GAG						243

## (2) INFORMATION FOR SEQ ID NO:1031:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1031:

AATTCGGCCT	TCATGGCCTA	ATTGAATTCT	AGACCTGCCT	CGAGATTACA	GCCAGAGTCT	60
CCTAACTGCT	CTCCATCTAT	TCTCTAATCC	CAATAGCTAC	TCTCCATGCA	GCTGTCAGAG	120

TGGGCCTTAT AAAACATTGG TCAGGTCATG CCAGGCCTCC GATGGCTCCC ATCACACTCA 180  
GGGTAAGAGC CGAAGCCCCA TGTGGGTGTC TAAGGCCCCG TGTGATCCTT ACCCACTTCT 240  
CTCGAG 246

(2) INFORMATION FOR SEQ ID NO:1032:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 114 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1032:

GAATTTACAC CTGCCTCGAG TACTCCCATG CCACTTTCAG CACAAATATC ACTTATTATG 60  
TGCTGCTTGA ATATTATTTT CTTTATTCTT AAGTTTGGTC CATTCACTCT CGAG 114

(2) INFORMATION FOR SEQ ID NO:1033:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 302 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1033:

GAATTGTTGT TCTTTTCTTT TCCATGATAT CATTATATGG ACAGTTTAGG GTGGTCTCAT 60  
GGATTATAAC CATTGCGATA TTTGGTTCAC TAACAATTTT CTTACTGGCC AGAGTTCTTG 120  
GTGGAGAAGT TGCATATGGC CAAGTCCTTG GAGTTATAGG ATATTCATTA CTTCTCTCA 180  
TTGTAATAGC CCCTGTACTT TTGGTGGTTG GATCATTGTA AGTGGTGTCT ACACTTATAA 240  
AACTGTTTGG TGTGTTTGG GCTGCCTACA GTGCTGCTTC ATTGTTAGTG GGAGATCTCG 300  
AG 302

(2) INFORMATION FOR SEQ ID NO:1034:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 262 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1034:

GAATTCGGTC TTCATGGCCT ACCTGAGCAC TCTGCATTTT AATTCTGTGT TCTTCCCTT 60  
TATCTATGTG TTGTCTCTGA GGAAATGTCC TTTAATGTCT TCCTCAGGCT TGATACCTAA 120  
TTTGAGATGG TTCAAACAAT TTTTTCCTTT TCCCTTCACT GGAAGCTTGT TTACTCATTC 180  
TGTTTGCTTT CATACTTCA AATGCTGTCT TTTATTTTTT GGTGGTATTT TTTTCTCTT 240  
TCTCAGGTGT AACATACCTC GG 262

(2) INFORMATION FOR SEQ ID NO:1035:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 388 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1035:

```
GAATTCGGCC TTCATGGCCT ACCTACTAGG CATGTTTTAT GACACAGATG ATGCGAGTTT      60
CAAGTGGTTT GATAATTCAA ATATGACATT TGATAAGTGG ACAGACCAAG ATGATGATGA      120
GGATTTAGTT GACACCTGTG CTTTTCTGCA CATCAAGACA GGTGAATGGA AAAAAGGAAA      180
TTGTGAAGTT TCTTCTGTGG AAGGAACACT ATGCAAAACA GCTATCCCAT ACAAAGGAA      240
ATATTTATCA GATAACCACA TTTTAATATC AGCATTGGTG ATTGCTAGCA CGGTAATTTT      300
GACAGTTTGT GGAGCAATCA TTTGGTTCCT GTACAAAAAA CATTCTGATT CTCGTTTCAC      360
CACAGTTTTT TCAACCGCAA CCCTCGAG                                         388
```

(2) INFORMATION FOR SEQ ID NO:1036:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 258 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1036:

```
GAATTCGGCC TTCATGGCCT ACTTTTTAGT AAAGAGCAAA CTCATAAATT TTGGCATCAG      60
AGTTTGAGCT TTATTTTCT TAAATGAGTT TGAAATCAAT TTAATATTTC TCTCCAATTC      120
CCTAATGTCT CAGAAGTGAA TTTACAGTAT ACCTTTGTTT TTTCGTATTC TTAAGTAGTA      180
TTTGGATTTT ATTTAGTAGT TGCAGTACTA AATAAGGAGT GGGGAGTTAA TTACAAAACG      240
AATCAGGTGA CTCTCGAG                                         258
```

(2) INFORMATION FOR SEQ ID NO:1037:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 85 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1037:

```
GCGATTGAAT TCTAGACCTG CCTCGAGTGA TTTGGCCTGC ATGGTTTTCC TCCTACCCCT      60
TTTTCTTTGC CTGGGTCAGC TCGAG                                         85
```

(2) INFORMATION FOR SEQ ID NO:1038:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 248 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1038:

```

GCGATTGAAT TCTAGACCTG CCTCGAGGGG TTTGGAGCTC TGTGGGTGG TGACCTCAGT      60
CCTGTTTACC CCTGCAGAAG AAGGACCCAG CCCAGTTCCT GCAGGTACAT GGCCGAGCTT      120
GCAAGGTGCA CCTGGATTCT GCAGTCGCCC TGGCCGCTGA GAGCCCTGTT AATATGATGC      180
CCTGGCAGGG GGACACCAAC AACATGATTG ACCGATTGCA TGTCCTGCT TAGGCCATGA      240
AGGTCGAG                                     248

```

## (2) INFORMATION FOR SEQ ID NO:1039:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1039:

```

GAATTCGGCC TTCATGGCCT AGTCACTTAA ATAGATTGG TGTGAAATTT TATGATAAAA      60
GGTGACTTTT GTTCTAGTAA GTATTCTCAA AGAAAAGAGA GTGAGTAGCT ATTTTGGGAT      120
GAAGATAGTT ATAACGAGA TAGCGGTTTT TGTTTTTGT TTTTGTTTT GGCCGAGCG      180
GAGTGCTGTG GTGCGGTCAT GGCTCACTGT AACCTCAGCC TGGGGTCAAG GTCTGCCCAT      240
CTCAACCTC GAG                                     253

```

## (2) INFORMATION FOR SEQ ID NO:1040:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1040:

```

GAATTCGGCC TTCATGGCCT AGTTCAAAAA TAAAGCAAAT ATTTATTTTG GTATTGTTTT      60
GAGCACAGCT GATTTTTAAC ATTTCTTTC ATAACACTCA GAAATCATTA ACAATTGTTT      120
GCTCATTTGG TATGGGTTT TTGTCTCTT TTTTTTTTG GTTCTTTTA GGTGCTTTCT      180
TTTAACATTG GTCATGTTT ACCCTTTTTT TTTTCATCCC CCCAGTCTCG AG                232

```

## (2) INFORMATION FOR SEQ ID NO:1041:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1041:

```

GAATTCGGCC TTCATGGCCT ACAAGGACGT TAAAGGCATT TTATCCAGC GTCTTCTAGA      60
GAGCTTAGTG TATACAGATG AGGGTGTCCT CTGCTGCTTT CCTTCGGAAT CCAGTGCTTC      120
CACAGAGATT AGCCTGTAGC TTATATTGA CATCTTCAC TGTCTGTTGT TTACCTACCG      180

```

TAGCTTTTTA CCGTTCACCT CCCCTTCCAA CTATGTCCAG ATGTGCAGGC TCCTCCTCTC 240  
TGGACTTTCT CCAAAGGCAC TGGACCCTCG AG 272

## (2) INFORMATION FOR SEQ ID NO:1042:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 286 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1042:

GAATTCGGCC TTCAGGGCCT AGATTAAATC TCAAGGTGGA CTAGGAGAGA ACAAGCAGAC 60  
TTCTATAGAA CAGTGTCTTC CTTTGGTGTT GTTTACGATC AAGAAAAGAA AACCTTTGAC 120  
TGGACACAGT TCCGCATCAT TTCCCGTTTG GACAAGAAGT CGGATGAGAG CCTGGAACAG 180  
TATTTTATA GTTTGTGGC CATGTGCCGG AATGTCTGTC GTCTACCCAC ATGGAAAGAT 240  
GGCGTCCCC CAGATACCAC CATCTACGTT GAACCCATTA CTCGAG 286

## (2) INFORMATION FOR SEQ ID NO:1043:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 230 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1043:

GAATTCGGCC TTCATGGCCT AGTGTAATCT TATTGGGAAC CTAAACTGC TCTTAAAGTC 60  
TTTTTGAAAA CTCAGACATA TTTTGGCAT TACCTTTTTT TTATTGGAAA GGAAAAATGA 120  
AAACCTTCA TTTTATTAAT AATTCTATAT TCCACTCCTG TATTTCTTC TCTGGATGA 180  
TGATGGTGAT ATTATTTCTC ACTTTTCAA ATAATACCCT GGGACTCGAG 230

## (2) INFORMATION FOR SEQ ID NO:1044:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 238 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1044:

GATTCGGCCT TCATGGCCTA GGGAAAATAA AAATGTATTC AGTAGCACGT GGGTTATGGT 60  
TTCTCATAGA CCAGGGGATA AGATTAAAAG TCACTGAAGA GTGGGAAAAT GCATGTTGAG 120  
AAGATGAGAA TGGCCTGTAT TTTCTCCAGG GGAATCTGTG TAATGTGCCT TTTCCCTCTC 180  
CAAAATGCCTA GAACCATGGC ACTGTGTCTT ATTTATTTAA CCGTTGGGCC GTCTCGAG 238

## (2) INFORMATION FOR SEQ ID NO:1045:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 333 base pairs



(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1045:

TAATTCATCT	AAGTTGTTGA	ATTAGCATAA	AGTTTTTAAT	AAAATTTTAT	GTAATTCCTT	60
TTTAGAGAAC	TAACTTTTGA	AATTGCTGAT	TTTCTGTTTT	CCGTTTCAAC	ATTTTACACA	120
CTGGTAGTTA	ATAGTTTTTT	CTCTCCAGCT	TACTTCGTGT	TTGATTACT	TTTCCTTTTC	180
TGTCTTCTTG	AGGTGGAAGC	TTAGAGGATT	AATGATTCCA	TTTCTTTCTA	ACGAAATCAC	240
TTAAACTAT	AAATTTCACT	CCAACACTT	CTTTAGCTAA	ATTCCATAAA	TTTACTATG	300
TTGTGTTTCC	CTTTTTCCT	CCGTCTCCTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:1046:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 429 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1046:

GAATTCTAGA	CCTGCCATTG	TGGGGAGTGG	AAGTGGCATG	ACCTCAGGAG	CCAGTTCTGA	60
GTCCAGGTGA	ACCAAAGCTC	AGTTTCTTTC	ATCTTTGAAC	CTGAACTCT	TACCTCCAAG	120
AAAAAGGGCC	CAGGAATTTG	GGCCTTCTTG	TTTATTTGTC	CTTCTGCCCC	TCTCCCTATC	180
TAACCCCTGG	GTAAGGGTGA	GCTTGAAGGT	GATGGTGACA	GTGGCTTCTG	TGTGTGTCAG	240
TCCACCCTCC	AAGCAATGCT	TAGAAACCAG	TCCATAAGCC	AATTAACACA	TCATTTTCTAG	300
GGCAGATTTG	CAAGTTCTCA	GTTGTTTACA	TGTTTCGTTA	AGTACTAACC	TCCAAATTAA	360
TAAAGCATGA	CACATGACAT	CACACATTTC	ACAATTTGTA	CCCAAGCAAA	GTTTCATGGAG	420
GTACTCGAG						429

(2) INFORMATION FOR SEQ ID NO:1047:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 65 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1047:

GCTTGGTAGA	CCACATCCAA	GGGACGATGA	GGTTTCCCAG	AGGAGGAGTG	GTCACCATGA	60
TCGAG						65

(2) INFORMATION FOR SEQ ID NO:1048:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 498 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1048:

GAATTCGGCC	AAAGAGGCCT	AAATTGCGTT	TAATGTGTCA	TCAAACCTTG	TATTCAGCTA	60
TCTAGAGCCA	TTTTCTGGAT	TCATGCAATA	CATTTTCCCC	AAACCCTTTT	TATTTTGAAA	120
AAGCTCAAAC	ACAGAAAAGT	TGAAAGAATA	GCGTAAAGAA	CATCTGGATG	TGGTGCAGGG	180
TCTCATGTTC	ATAATCCCAG	CACTTCGGAA	GGATTATTTC	AGACCAACCT	GGGCAACATA	240
GTAAGACCCA	ATGTCTACAA	AAATGTTTAC	GGATAAACCA	GGCGTGGTGG	TGAGGTAGTC	300
CCAGCTACTC	AGGAGGCTGA	GGTGGGAGGA	TTGCTTGAGC	CCAGGAGTTC	AAGGCTGTAG	360
TGAGCAATAA	TCACATCACT	GCATTCCAGC	CTTGAGTAAC	AGTGAGACCT	GTCTCAAAAA	420
AAAAAAAAAA	AACACCAAAA	ACAACCAACT	GTGTATATCT	TGCACTGATA	ATCCCCCGAA	480
TTCTAGACCT	GCCTCGAG					498

(2) INFORMATION FOR SEQ ID NO:1049:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1049:

GAATTCGGCC	AAAGAGGCCT	AAGCTGAGAT	GGGTGTTAAA	AGTTAAGACA	CAGCTTAAGA	60
CAGAAGCATT	GTAAAACAGG	AACAAATACT	GGCTTAAACC	TGATGTCTCT	AACTATATTC	120
CTCTATTTTA	AGAATGTTTT	AGTATCTGAT	AGTTTCATCA	GCCTTTCCAT	TTTCCAATAT	180
GTGACCTTTA	TTCCCACCAT	GTCCCAAATA	AACGAGTCCT	AGGATTTCCT	AGAAGGTGGA	240
CCTCAATTAT	TGTGTCCCTT	TTATATATAA	GGCAAACATT	GCTTTTAAGT	TCTGTGGGAA	300
CATGGGAACT	TTCACTAGAA	TGCTTAGAAT	GTTCAGAAAA	AATGTCCCAA	AGCTCTCTTC	360
TGGTCCATAC	AAGACAATCA	GAATGTAACA	CAGTAGCAGA	GGGTGTGGAA	CATACACTAG	420
TCATATTTGA	TTCTCTCTGT	CAG				443

(2) INFORMATION FOR SEQ ID NO:1050:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 68 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1050:

GAATTCGGCT	AAAGAGGCCT	ACTTCTGGCT	ATTTTCAAAT	ATATAATATG	TTATTGTTAA	60
CTATACTC						68

(2) INFORMATION FOR SEQ ID NO:1051:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1051:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGCAA      60
GACTCTGTCT CCAAAAAAAAA AAAAATTTAA AAAAAAAAAA ATTTTTTAAA AAATTTTANT      120
TAANGTAAAT TTAAAAATGT TCAGTGAAAT GGTAATAAAA AAAAAAAGAC GCACAAAATA      180
CCTTCATGTT TCTCATCTCT TTTCCCTTC AGATTCTGCC TTTCTTCCAA TTCAGCTCTT      240
CTTTTCCAGT CTTTCAACCA ACCACCACGA CTCTCGAG                                278

```

## (2) INFORMATION FOR SEQ ID NO:1052:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1052:

```

CTCGAGGACC AAGGATGAAG AGCATAAGAA GATGAAGATT GTAACTTGT ATAAAATTAT      60
CTTGGTGAGA AGACAAATTG TAAAGTAGAT ATTTGTAATC TTTTACCACT TTGGGGTTGC      120
TTTTTTCCCG GAATTCATCA GAACTTTGAA TTTTTTTTTT AAATGGGCTG TTTTAAATGC      180
AGGGGCTTTT CTTCCCTAGA AACCCAATTC TAAGCAGAAA AAGNAAAAAN ACACCAAAAA      240
TAAAAAACCC CCCTCGTGCC GAATTNTNGG CTTCGGGGGC CAAATTCGGG CCTCTTTGGC      300
CGAATTC                                307

```

## (2) INFORMATION FOR SEQ ID NO:1053:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1053:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGCAG      60
TTAAGATCTG GGTGATTCTT TAGGGAAACG GCTGGTTGAG AGGCTTTGAT GGAATCCCAT      120
TCTCTGCTGT GGCCAGAAGG TGGTGCTAGA GGCCAGTCCC ACTTGGAATG GACCTGGGCC      180
TCTGCCAGGA TTCAAACCAC AAAGAACATT TGGAACTGGG ATGTTTGCTT TGAAGCAGCC      240
TGAAAACAAG TGAAAAGGAA ACCAAGATAA CTCTCTCTCC CTCCGCTGGC AAGGATCAAA      300
AATACCTTGT GCAGGGAAGC CCGAGCCTCG AG                                332

```

## (2) INFORMATION FOR SEQ ID NO:1054:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1054:

```

GAATTCGGCC AAAGAGGCCG GAATTCGGCC TCGAAGCCAA GAATTCGGCA CGAGGCCTCG      60
TGCCGCGCCG TTTTTTTTTT TTTTTTTCAC AGGGGGGCAG TCGGGATTAT AATACACTGT      120
AGCAGTTGGC TGGGGAAGAG TCTATCAAAT TCCATGACCA ATTGGACTTT TCTCCACCT      180
GTAATATAAA TAAAATATGT ACTGTTTCAT ACTGAATTTT TTCAATGCAT TGGGGTTCAA      240
CATAAAAGGC ACAAATAAAT AAAAATATCA TTAAATAAAC GGAAATTACA ATTTCAAGTT      300
TCATGTGGAG TTGTATCTCA CTGTTTGGTT ACTTTTCCA ATTTAATTG ACAGACTTAG      360
TAATAGCACA CAACTGTCCT ACCCTCGAG      389

```

## (2) INFORMATION FOR SEQ ID NO:1055:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 213 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1055:

```

GAATTCGGCT AAAGGGTCTA CGAGGTCAGC AAGGACGCC AAGGAGACTC AGTCATGAAA      60
GGTGAAGTGC TCCTGTTTTT CAGTGTGATT GTCCTGCTCC AGGTGGTATG CAGCTGCCCC      120
GACAAGTGT ACTGTCACTC ATCTACAAAT TTTGTAGACT GCAGCCAGCA GGGTCTGGCC      180
GAAATCCCTT CCCATTCCCC TCCGTCGCTC GAG      213

```

## (2) INFORMATION FOR SEQ ID NO:1056:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 173 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1056:

```

GAATTCGGCC TTCATGGCCT AGCGATTCCA GGTTTTAAAT AGTTTGTAAG TTTTCAGTT      60
CTACACACTT TATCATCCAC TCGTGATTTT TTAATTAAAG CGTTTAAATT CCTTTCTCTG      120
TTCAGCTGTT GATGCTGAGA TCCATATTTA GTTTTATAAG CTCCCCCTC GAG      173

```

## (2) INFORMATION FOR SEQ ID NO:1057:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 555 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1057:

```

GGTCATACTC TCTCATCCAG ACTGGAGTGC ATGGAGTGCA GTGGCACCAT CTCGGCTCAC      60
TGCAACCCCT GCCTCCCAGG TTTAAGCAAT TCCCCTGCCT CAGCCTCCCG AGTAGCTGAG      120
ATTACAGGCA CATGCCACCA TGCCTGGCTA ATTTTGTAT TTTTAGTAGA GACGGGGTTT      180
CACCATGTTG GCCAGGCTGG TCTCGAACTC CTGACCTCAA GTGATCTGCT CACCTCAGCC      240
TCCCAAAGTG CTGGGATCAC AGGTGTGAGC CACTGCACCC GGCCTAGTTT CCATTTTCT      300
GTTGATATTT ACTTCTATTC ACTCATTAAG ACTATATTTT ATTTCTTTAA TATATTTTCC      360

```

```

CTTAGTTCTT TGAACATATT TATAAGAGCT ATTTTAAAGT ATTTGTCAGT TGAATCTAAC      420
ATCTTTTGGG GCCATTTTCT ATTGACTGCT TTTTCTTGA TGATGAGTCG CATTTCCTT      480
TTTGCCTATC TAGTAATTTT TAAATTATAT ACTGTACCTT GTGGATGTAT GGTAGAGACT      540
CTGGGGTCTC TCGAG                                         555

```

## (2) INFORMATION FOR SEQ ID NO:1058:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1058:

```

GAATTCGGCC TTCATGGCCT AGAATGTTAG AAGGTGCCTG CCGAGGCGGG ACAGAGTGTT      60
CGCTCGCGCT GGAGAAGGCT CTGCTCAGCC CTGAGAGTCC CTTCCTGCCC CACCGATACT      120
GGCACTTTAA CAAGGAAGCT GACCGCACAG TGTCCAGACG AATTGGCCCC CAGAAGATGG      180
GGAGTTCTGT CCTGCCCTTC TGTGTCTGCG TGACCTCACC CAGCCTAGGA GGGAGGTGCA      240
TTCAGGGTAG ATTTGCCTCT CATTCAAAGT TCTGGGGCTT TGGGTGAAA ACAGCCAGCT      300
TTGGCGCTGC TGGGGAGACT CGAG                                         324

```

## (2) INFORMATION FOR SEQ ID NO:1059:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 219 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1059:

```

GAATTCGGCC TTCATGGCCT ACTTGATGCT GCAAAGAACA AGATGCGAGT GAAGATCAGC      60
TATCTAATGA TTGCCCTGAC GGTGGTAGGA TGCATCTTCA TGGTTATTGA GGGCAAGAAG      120
GCTGCCCCAA GACACGAGAC TTTAACAAGC TTGAACCTAG AAAAGAAAGC TCGTCTGAAA      180
GAGGAAGCAG CTATGAAGGC CAAACAGAG CAGCTCGAG                                         219

```

## (2) INFORMATION FOR SEQ ID NO:1060:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1060:

```

GAATTCGGGC CTTATGGCC TAGTATTTAT AGCCAAGGAA ACAGGGCTAT GAGTTTGTAC      60
TGTAAGCAGC AGTAGGGAGG GGGAATTGGA AGCAGGGGGG AGGGCTCTGC AGTAGTTCAG      120
TTGATGCATA CATAAGGCCT GAATTAGGGA ATTAGGAGAG TGATCATAGG TGTGGAAAGG      180
AGGGGAGGGC TTCCAGGCAC ATTTGGTGTA AAATGGATAC AACTTGGTAA CCTGTACATT      240
GCTACCTTTG CACATTTGGT TTCCCTGTC TCAAAGGCTC CCTCTTCTCG AG                                         292

```

## (2) INFORMATION FOR SEQ ID NO:1061:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1061:

```

GAATTCGGCC TTCATGGCCT AAAGAAAACA AACAAACAAA GAGAAAACCC ATGAGCATT 60
TAATTC TGAC TTTT TACTT TTCTCCCTAC ATTTAGAATA CTGTGGCACT TTCTGTTATC 120
CAAATGTGTC TCAGTCTCCA TATTTAAGGA CTGTGGGTGA AAAGCTTCTA CCTGGAATTG 180
AAGTGCTTTG GACAGGTCCC AAAGTTGTTT CTAAGAAAT TCCAGTAGAG TCCATCGAAG 240
AGGTTTCTAA GATTATTAAG AGAGCTCCAG TAATCTGGGA TAACATTCAT GCTAATGATT 300
ATGATCAGAA GAGACTGTTT CTGGGCCCGT ACAAAGGAAG ATCCACAGAA CTCATCCAC 360
GGTAAAAGG AGTCCTCACT CTCGAG 386

```

## (2) INFORMATION FOR SEQ ID NO:1062:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1062:

```

GAATTCGGCC TTCATGGCCT ACATGAAGCT GAATTACTCT CATCTTATAT CTCTCTGCAG 60
TGGCATATCC TGATGGTGAT TTCCTCTTTT TGTGCCTCAG TTCACCCCC TATGGAATGG 120
GGATAAACAC TTGCGGCTGG GCATGGTGGC ATGTGCCTGT AGTCCCAGCA CTTTGGGAGG 180
CTGAAGTGGG AAGATTGCTT GAGGCCAGGA ATTTGAGACC AGCCTGGGCA ACATAGTGAG 240
ACACTCTCTC TACAAAAAAA AAAAAGAAAA AAAAATCAG ATGTGGTTGG TGCATGCTAC 300
TGAGGCGAAA CTCGAG 316

```

## (2) INFORMATION FOR SEQ ID NO:1063:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1063:

```

GAATTCGGCC TTCATGGCCT ACTAGACCTG CCAAGCTTTC TTCCTTCATA CTACATATTT 60
CACAAAATTT GCTCGTCAGG TCTGCAAAAA TACCCTCCGG CTGCGGCAGG CAGCAAGACG 120
GCCGTTTGTG GCTATTAATT ATGCTGCCAT TAGGGCAGAA TGTAAGATGC TTTTAAATTC 180
TTAACCTTAT ATGTTGTGCT TCTGACCATT TTCTCTTTC CTCTCTTTC TTTT TTTT 240
GTTTGT TTTGT TTGCAATAAA CATAAGTTCT TGTGTACAGC CCACTCGAG 289

```

## (2) INFORMATION FOR SEQ ID NO:1064:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1064:

```

GAATTCGGCC TTCATGGCCT ACAGAGCTGA GAAATAATTC CCTTGTTGTGTT TTATAAGTAA      60
GAGTTAAATC CCTCCCATG TAATGTAGCA CCAGATCGAA GTAAACAGAC TATGATTTC      120
GTGCTAGACA CAGCCTTAAG GCAGAAGAAA TTACACTGTC ATGCAAAGGA TATGTAGCTG      180
CTGCTATTTT GGTGCTTGAA TTCTTCGTTG TCACATAGTT GAAGGCAATC CAGATGAGGA      240
AGAGTGTTAA CCAACAAAAA GAGAAAATTC CCTGCACATG GTCTCGAG      288

```

## (2) INFORMATION FOR SEQ ID NO:1065:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1065:

```

GAATTCGGCT TTCATGGCCT ACTGGGAGCT ATCTTGTCTA CCTTGAGGTT CCTGAACAAT      60
GAATTCCTCAT TAATGAGCAG TCTTCAGTAT TAAACCACCT GTCTTGTACAC CTCATTTTGC      120
ATTACTGTCT TCCGTGGATG TTTCACTTAC AACTGTAATG TTATTTATAG AACCAACATTA      180
ATCCATTAAA GCTAACCTAT TTTTCAATAT TTATGATAAT CTATGTACAT ATATTGTCTG      240
TCCATATGTA TTTGTAAATA GGTGTATAT AATGTCAGGT TTGGGTCTTG GGTTCAGTG      300
TATATATTCC TGTAAGTTTC TTAAGTGCAT TTGATGAAT TCACATTATG TAACTATAAG      360
AATTGTCCCA AAAGTACCTG TACAGAAAAT TGAATATTGA AAAATTGACA AATTGTGTAC      420
AAACACTAAA AAAAATTGTG TTAAATTGTA TTTGCAATAA ACAACATCAA ATTTTTCAT      480
GAAATCTGCC TCGAG      495

```

## (2) INFORMATION FOR SEQ ID NO:1066:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 507 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1066:

```

GAATTCGGCC TTCATGGCCT AAAGATTATA AAGGAAAGGG GGGTAGTTAA GATTTAGAAT      60
TCAAGTTAAA TTTTCAAAAT TGGGGCAGTC AGGCATTGTG ATCTTTTAGG GCAACAAGTA      120
AAACATGTAG AGTGCTTGCT ATCCCACTTC ATAAAGCTTT TACCCAATCT TATTTCTAAA      180
CCTCTGTGCA TTCTTAGTGT CTCTCATTG TGAAACAGAA AATAAGGAAA AACATTTAAC      240
TTAGTTTTCT AAAATCAGAT AATCCTAAAC AAAAATGTTA GTCAGGGTCA CTAAAAAGTA      300
TTGCACATTT ATATAAATAC AGTCCTTTTA AAATTTGACT TTTAAAAAAC AAAAGACTTT      360
GTACGATATT GTGTTTTTAT TGCCTTTGCA ATATTTTAT AGTAGCCTTT ATGAACCTCAG      420
TATAAGTGCA AGTTGTTTGA AAAGGTGTTT TTATTAGTGC ACAATAGAAT TGTGAGGTTT      480
TCAATAGATG TCATGAGATT CCTCGAG      507

```

## (2) INFORMATION FOR SEQ ID NO:1067:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 393 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1067:

```
GAATTCGGCC TTCATGGCCT ACTTATTTTT TTCTTTTAAA CAAATAAGCA CACATTCTTT      60
TTAAATAAAG TTTCTCTTCC CCAACCTAAA AGTAGTAATG CTAGAATTG AGCATAGCAG      120
AAAAATATTT AGGAAAATTA AATCCCAAAC AAGAGAGACC ATCTTGGACT GTGCTCACTC      180
GGGTGGAAAG TCGACCCAGG TGCCTGTGTG CTTGACAGAG GCGTGGCTGC ATCCGCGTAG      240
CTGACCTTCA GATGGACTGG AGTTAGCACA TTTGTAGTCA TTTTCCAAC CATTCTTTTCG      300
TATCTGAGGT ACGTTTTTGA CCTGTTTGTG TATGTCACTC GCGATCTTGA AGCACACTCT      360
TTCATTTACT TAAATATTTT CTGAGCACTC GAG                                     393
```

## (2) INFORMATION FOR SEQ ID NO:1068:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 290 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1068:

```
GAATTCGGCC TTCATGGCCT AAGGTAATGT GTCAGTGGAT GGAAAAGTTT AGAAAAGATC      60
TGTGTAGGTT CTGGAGCAAC GTTTTCCAG TATTCTTTCA GTTTTGAAC ATCATGGTGG      120
TTGGAATTAC AGGAGCAGCT GTGGTAATAA CCATCTTAAA GGTGTTTTTC CCAGTTTCTG      180
AATACAAAGG AATTCTTCAG TTGGATAAAG TGGACGTCAT ACCTGTGACA GCTATCAACT      240
TATATCCAGA TGGTCCAGAG AAAAGAGCTG AAAACCTTGA TACTCTCGAG                290
```

## (2) INFORMATION FOR SEQ ID NO:1069:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 319 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1069:

```
GAATTCGGCC TTCATGGCCT ACTCGACTCA TATTTTTATC ATACATTTC AAGTCAGTTG      60
CTGATGTAA TCCCATTTCA ATGTGGGGCA GACTCTCGGG GTAATTTCAA AAAGATGTCT      120
CAAACATGTT TGTGTGTGTG TGTGTGTGTG TGTGTGTGTG TGTGTGTGTG TGTGTGTGTG      180
TGTGGAGACA GGGTCTCACT CTATTGCCCA GGCTGGAGTG CAGTGGTGCC ATCATGGCTC      240
ACTGCAGTCT CGACCTCCCA GACTTAAGCA ATCCTTCCCA AATAGCTGGG ACTCCAGGGG      300
CACCCCACTA CAACTCGAG                                     319
```

## (2) INFORMATION FOR SEQ ID NO:1070:



## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1070:

```

GAATTCGGCC TTCATGGCCT ACTTCTAAAT GGCAAACAGT TGTCTTGAAG GCACTGTCTT      60
TTTCTACCTA GATGTTGGGT GGAAAAAAGC TGCCTTTTAT ATAGAAGTTC      120
TTGGGAATAT TTCTCATATA GTGAGATGAA CAGAATGCAA AAGTTTCTT CCTGCAGGAT      180
CTCCCAAAAT CCTTCTTGGC TTGAATTTT CTTCTCACTT TTTCTTTTGA AAAGCTTTGT      240
TCCTTTTGCA CCTTGGAAAA ATAAGTCTTG TTTGTCCTGA CAGCAGAGTG CAAGCATCTA      300
TTGCATCAAA ATTCCCAAGT GGAATAGAAA ACCAATGGTC CTTTCTGAA TTTCGTTAGC      360
AGTAGCAACA AACATTTCAT TATAACCTCG AG                                392

```

## (2) INFORMATION FOR SEQ ID NO:1071:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1071:

```

GAATTCGGCC TTCATGGCCT ACACAATGGG AATCCAAGGA GGGTCTGTCC TGTTCGGGCT      60
GCTGCTCGTC CTGGCTGTCT TCTGCCATTG AGGTCATAGC CTGCAGTGCT ACAACTGTCC      120
TAACCCAACT GCTGACTGCA AAACAGCCGT CAATTGTTCA TCTGATTTTG ATGCGTGTCT      180
CATTACCAAA GCTGGGTTAC AAGTGTATAA CAAGTGTGAG AAGTTTGAGC ATTGCAATTT      240
CAACGACGTC ACAACCCGCT TGAGGGAAAA TGAGCTAACG TACTACTGCT GCAAGAAGGA      300
CCTGTGTAAC TTAAACGAAC AGCTTGAAAA TGGTGGGACA TCCTTATCAG AGAAAACAGT      360
TCTTCTGCTG GTGACTCCAT TTCTGGCAGC AGCCTGGAGC CTTTCATCCCT ATACGCTCGA      420
G                                421

```

## (2) INFORMATION FOR SEQ ID NO:1072:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1072:

```

GAATTCGGCC TTCATGGCCT AATCGGTCAC TGATAGTATG TATTTCTTTA GTAAGAATGT      60
GTTAAATTA CAATGATCTT TTAAAAAGAT GATGCAGTTC TGTATTTATT GTGCTGTGTC      120
TGGTCCTAAG TGGAGCCAAT TAAACAAGTT TCATATGTAT TTTCCAGTG TTGAATCTCA      180
CACACTGTAC TTTGAAAATT TCCTTCCATC CTGAATAACG AATAGAAGAG GCCATATATA      240
TTGCCTCCTT ATCCTTGAGA TTCACTACC TTTATGTAA AAGTTGTGTA TAATTGTAA      300
AATCTGTGAA AGAATAAAAA GTGGATCCCC TCGAG                                335

```

## (2) INFORMATION FOR SEQ ID NO:1073:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1073:

```

GAATTCGGCC TTCATGGCCT AAAAAATAG GCACAGTTTC AGATGCTTCA GCATATGAGG      60
CATGGATACT TCAATCATTT GCAAAGGGTT CTGCTCAGTA GACTGAATGG AAAAGATGGT      120
CATTGCTCTT TAATGTAATT TTGCAGCTCT CATCAAAGAA AATATCTCCA TGAAATTTAT      180
TGGTAACTGT TTATCTTTGA TCAGTGCAAA CTGAAGTCAA ATATACAAGG TAAACACACA      240
TAAAGATAAG TTCACACATT TCTGTGAATT TTCTAAATGT ACACACTTCT GCAAATTTCTC      300
TAAATTCACA AATAACAAAT TTGCATGCAT GCAAGCATAT GTGCACATGT GCACACCTCG      360
AG                                                                                   362

```

## (2) INFORMATION FOR SEQ ID NO:1074:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 612 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1074:

```

GAATTCGGCC TTCATGGCCT ACCCAGGTGA TCAATGTTTT CAATGCGATC AGTAATAACC      60
ATGTGCTCAT GAATCAGATA GGAAGGAGGC AAATAGGTTT CAGCCTTGAT GTTAATAAGT      120
AACTCCAGTA GGTTCCTGGG TGGCATAACA ATGGAAGTGT TCAGAGGGAT CACATAGCAC      180
TTATCCAGGT TAAGATCTAA ATAGGCTGTA AGTTTCTTGT TAAAGTCATG AACAATGTTG      240
GCAGGATCAC TATCTGCAAA CTCTGGGACA GGCACACTGA TAAATTCAAC TTCTCTTCTT      300
CAAAGATTTT AATATTTTCT TCAATTGTCT GGTAGAGAGC AGCTGGGGCA TCTGCAGAGG      360
GCTCATTTAA GATGACATCA TCTTTGATGT ACTTTATTCC ACAGTAGTAC ACGTCATCTG      420
GTTGAAGTGC AAAATATTTG TACAAGTATG CTCCTCCTAG AATAACACCT GCAAGCATAA      480
ATGCTAGTCC AAAGCACATG CACCACCACC ACCCGGCTAA TTTTGTACT TTTAGTAGAG      540
ATGAGATTTC ACCCTGTTGG CCAAGATGGT CTTGAACTCC TGACCTCAAG TGATCCGCC      600
ACACCACTCG AG                                                                                   612

```

## (2) INFORMATION FOR SEQ ID NO:1075:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1075:

```

GAATTCGGCC TTCATGGCCT AAGTTTGTGG TCCTCTGAGA ATTCTCTGAA GGAGGAAATG      60
GGTTGACCTA TTTGGTTGCT ATGAAGTAAA AACAATCTTG TTTTCATTTT TTAGTGAACA      120
TCTGGGTTGC ATTTATTATT TCACATTCTG GAGATTCTGT AAAACCACAA TTTGATAATA      180
TGAGGGTTCA TCAAAGCGGT AATTATTGAG CTATTTTATAT AGTTGATTCA AGAATTAGGG      240
TGGCGACTCG AG                                                                                   252

```

## (2) INFORMATION FOR SEQ ID NO:1076:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 151 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1076:

```

GAATTCCTAGA CCTGCCTCGA GTGTGATACC AGCAGCTATG AAGCAAACCTG TATTAACCAA      60
GTCTTTTATT TTCTGTGTTT TGATGCATGA CTTTCATGGC CTTGTCAACC CTAGAGACCC      120
TGCCCTCCC ATAGCTAGCG AACGTCTCGA G                                     151

```

## (2) INFORMATION FOR SEQ ID NO:1077:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1077:

```

GAATTCGGCC TTCATGGCCT AGGAAGTAGT CTAATAAATT AACAGTTATG GTTTTAATAG      60
GATCTGAAAG ACAATCTTTA AAGAAATGGG AGAAATGGG GGTATCAGTG AACCTATACC      120
AACCTCTCTT TGTACATAAA TATGGTGATG TAGCTAGATA TAAAAATCAG TGTCTTACTG      180
GCACCATTTA CAGTTTAGAA AACAATCTTT TTCTTAAAAA TGCCCATCTG ATTTCTATTT      240
TTAGGAGCTA CTTGGATTTG TATGTATTTT TTCTACGTGA AAATATATGT ACTCTTCACT      300
TTTGTTCCAG TACTATAATT GCTCATGCAC TCTTTCTCCC CTTTGAGAAC ATTCAGTGAA      360
ATACAACCTT ATCAAAGATT TGCTCAAAGG AGAAGAATCG CATGAGTGTG AAAAGTAGAT      420
GCTCGTAGCC AGAACAGAAA AGGTTACACA TGATCATGGC ACAGAAGATA GGAGGTTTGA      480
CTTGGTGGGC CATAATGTTT ATTATCCTTT TTGAAATAAC AGGGACCAGC AGCACTCTCG      540
AG                                     542

```

## (2) INFORMATION FOR SEQ ID NO:1078:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1078:

```

GAATTCGGCC TTCATGGCCT AGGTTGCCAT TACTTGTGAT GCCTCTGAAT GTGGAGGCTG      60
ACTCTCCCGT CTCTCTGTCC CTCCTACCCC ACGGGGCCGC AGCAAAAGCC ATCTGGGGCC      120
TTCGACTGGG CCATGTCTTC AGGAAGATTC CTGAAGAGGA GGGCCCGAAA TACCTGCCTT      180
TATAGGTTCC CAGAGTGCCC TAGAACATTC TTAGATACAT ATTTTAAAC CAAGTAGGAC      240
TCCACCTTAT TTTCTCCAAT AGTCCCCAAG CAGTACAGGT CACTTGAAGA CATAAACATT      300
CTTCTTGGTT GAGGGATCCA CGCCCTTGTT TCAGAAATGA CACCACAGAA GGCTGTGAGC      360
TCCAGGAGCA TCGGTTGGGA TGTCCGGATG ACCGGGGTTT AAAGGTTTTC CTATTCTCGA      420
TAAAGCCTGT GCGCACTGTA CGGGGAGTGG GGTGAAGCG TGTTCTCTAC ATAGGCAACA      480

```

CAGCCGCCTA AGTCACAAAG TCAGTGGTCG GCCGCTTCGA CCAACATGTG GTGAGCATTC 540  
CACGGGCGCA TGAAGTCTGG GTGCTGTGCT CGAG 574

## (2) INFORMATION FOR SEQ ID NO:1079:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1079:

GAATTCGGCC TTCATGGCCT AGGGGCCAGG CGGCCGCCGC GAGTCTGGTA TCCTGAGCTT 60  
CGTGAGTTGA GCGCTGCTGC TCCGCGGTGG AGTCACCGCA CCGCTCCCGG GATCATGGTG 120  
TTCTACTTCA CCAGCAGCAG CGTTAATTCA TCTGCCTACA CTATTACAT GGGAAAAGAT 180  
AAATATGAAA ATGAAGATCT GATCAAGCAT GGCTGGCCTG AAGATATCTG GGAGAGAATA 240  
TAGAAGACAT CCCAAAGGAA GTGCTGATGG ACTGTGCGCT CGAG 284

## (2) INFORMATION FOR SEQ ID NO:1080:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1080:

GTGAACACCA GAAATATCCC TGCAATTCAG CAGAACCAAA ATCCATACCT GCCCTTTCAA 60  
TGGAAACACA GAAACTTGGT TCAGTTTTGT CTCCAGAATC GCCAAAACCT ACTCCTCTTA 120  
CTCCCCTGGA GCCTCAGAAA CCTGGCTCTG TTGTTTCTCA TGAGCTACAG ACACCTCTTC 180  
CTTNTCCTGA GCCTCAAAA CCTGCCTCTG TTTCTTCTCC TGAACCTCCA AAATCAGTCC 240  
CTGTTTGTGA GTCTCAGAAA CTTGCCCCTG TTCTTCTCC AGAACCACAG AAACCTGCC 300  
ATGTATCTCC TGAGTCAGTA AAGGNTACTA TTNGTAATCC CAAACCCAG ATTCTCGAG 359

## (2) INFORMATION FOR SEQ ID NO:1081:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1081:

GCCCGGCAGA TGGGAAACGC ATCATATTCT GATTCTACC TGGAAGGAAT TTTGTTGAAA 60  
GGGGTTTTCA CCTGTGAGCC TTGGTCTGTC TCGGTAGGGT GGTCAACTTC AGTGGACTGT 120  
GGTTGGTTTC AGAGCGCCTG GCTGAGGAGT TCCACTGAGG GGAGCACTGG AGCAGCCCTT 180  
TGGCAGAGGC TGAGGAGGGA GATGGACCAG CCCACGCCTG GCACCTGGCT CCATGGCATA 240  
AGGAAAGGGA GATGCTGGCC TCTGTGCTCC TGCTGTCTTT TCCTGTTTCT GTTTGCGTTT 300  
GACTTAGTAG CAACCGACAG AGTGGAAGG GATTTGGTCT TCAGCAGTAG ACATCCTTCC 360  
ACCCCTGCCC TCAGCCAAGT CTCTTGCTGC CATGCCAATG CTATGTCCAC CCTTGCCCTT 420

CGGCCCAAGA GTGTCCAGCG GTGGCCCACT TTTTCCTCCC ACCACAACCT CGAG

474

## (2) INFORMATION FOR SEQ ID NO:1082:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1082:

```

GAATTCGGCC TTCATGGCCT AATGTGTGTG GCACAAAGAA GAAAGTGGAC TCTACACTGT      60
GTTAGTTAGG AAAACCAGAA ATTGGGCCAA ATTGCCTGTT TAGTGGGAGA GATANCTTTT      120
GAGAGCTGTG ATCCCGCTGG TGTGGCTGGC TCTGGGCAGA TATTGTATC TGAAATGACT      180
CATGCTGTGG GACCCTTCCT GAGATCTAAC ACTTACAGTG GTTTGATCAG AAATTGCACC      240
ATGCTTGCCA AGCAACTTTT GGACTAAAAG TTGCTGCCCA CGTATATCAG GGAAGAATA      300
TATATATATA TATATATAGT ACCTATCTTA GCATCTGATT TGTATGACCA TTAATTCAAT      360
GTAAAATAAT AAATTGGCTT TCCAGCTTAA ACTTCAATTT CTTGTATATT ATATGATCAT      420
GAGACAACCT CCTGGGCTG ATCAACAGCA GGACGCTAAA AAGATTGAGT ATCTGAGTCA      480
GGAAGGTAGA GGGCCAAACC TCGAG                                         505

```

## (2) INFORMATION FOR SEQ ID NO:1083:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1083:

```

GAATTCGGCC TTCATGGCCT ACTACTATTC AGAGACAACA GTGACACGGA CCTATGTGAT      60
GCTGGCCTTA GTGTGGGGAG GTGCCCTGGG CCTGGGGCTG CTGCCTGTGC TGGCCTGGAA      120
CTGCCTGGAT GGCCTGACCA CATGTGGCGT GGTATATCCA CTCTCCAAGA ACCATCTGGT      180
AGTTCTGGCC ATTGCCTTCT TCATGGTGTT TGGCATCATG CTGCAGCTCT ACGCCCAAAT      240
CTGCCGCATC GTCTGCCGCC ATGCCAGCA GATTGCCCTT CAGCGGCACC TGCTGCCTGC      300
CTCCCACTAT GTGGCCACCC GCAAGGGCAT TGCCACACTG GCCGTGGTGC TTGGAGCCTT      360
TGCCGCCTGC TGGTTGCCCT TCACTGTCTA CTGCCTGCTG GGTGATGCCC ACTCTCCACC      420
TCTCTACACC TATCTTACCT TGCTCCCTGC CACCTACAAC TCCATGATCA ACCCTCTCGA      480
G                                         481

```

## (2) INFORMATION FOR SEQ ID NO:1084:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1084:

GAATTCGGCC TTCATGGCCT ACCATTTTTA TTAAACCCAA ATCCATGGAA AATATCATGG

60

AAATGAATAA	GCGTCTAACA	GAAGAACAAG	CCAGAAAAAC	ATTGAGAGA	GCCATGAAAC	120
TGGAACAGGA	GTTTACTGAA	CATTTACAG	CTATTGTACA	GGGGGATACG	CTGGAAGACA	180
TTTACAACCA	AGTGAACAG	ATCATAGAAG	AACAATCTGG	TTCTTACATC	TGGGTTCGG	240
CAAAAGAAAA	GCTATGAAAA	CTCATGTTTC	TCTGTTTCTC	TTTCCACAA	TTCCATTTTC	300
TTTGGCATCT	CTTTGCCCTT	TCCTCTGGAG	TCTTCTTGA	GTACTGATT	CATGTTGAAT	360
TGTATCCAC	ACATCATGGT	CATCTCGAG				389

## (2) INFORMATION FOR SEQ ID NO:1085:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1085:

GCGATTGAAT	TCTAGACCTG	CCTCGAGACC	GCCTACGAAT	GGAAATCCAT	AAGAATGAGG	60
CTTGGCTCTC	TGAAGTCGAA	GGCAAAACAG	GTGGGAGAGG	AGACAGAAGA	CATAGCAGTG	120
ACATAAATCA	TCTTGTAACA	CAGGGACGAG	AAAGTCCTGA	GGGAAGTTAC	ACTGATGATG	180
CAAACCAGGA	AGTCCGTGGG	CCACCCAGC	AGCATGGTCA	CCACAATGAG	TTTGATGATG	240
AATTTGAGGA	TGATGATCCC	TTGCCTGCTA	TTGGACACTG	CAAAGCTATC	TACCCTTTTG	300
ATGGACATAA	TGAAGGTACT	CTAGCAATGA	AAGAAGGTGA	AGTACTCGAG		350

## (2) INFORMATION FOR SEQ ID NO:1086:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1086:

GCTCCACCAG	CTACTGAGAA	AATGGCCTGT	AAAGATCCAG	AAAAACCCAT	GGAGGCCTGT	60
GCCTCAGCAC	ATGTGCAACC	CAAGCCTGCC	CCTGAAGCCA	GTAGCCTAGA	GGAGCCCAT	120
AGCCAGAAA	CAGGGGAGAA	GGTAGTAGCA	GGAGAGGTAA	ACCCACCCAA	TGGCCCTGTG	180
GGGGACCCAC	TGAGCCTCTT	GTTTGGGGAT	GTGACATCCC	TGAAAAGCTT	TGATTCATTG	240
ACAGGTTGTG	GTGACATAAT	AGCAGAACAA	CTCGAG			276

## (2) INFORMATION FOR SEQ ID NO:1087:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1087:

GCAGAGACTT	AAAGGGTTAA	TAAAAATTGT	AAAGCCAGCA	GAGATTCCAG	AACTAAAAAA	60
GACTGAAACT	CAGACTACAG	GTGCAGAAAA	CAAAGCTAAA	AAGCTTACAT	TGCCTCTATT	120
TGGTGCCATG	AAAGGAGGAA	GCAAATTCAA	ATTAAAAACT	GGAACAGTAG	GGAAGTTACC	180

CCCCAAGCGT CCAGAACTCC CTCCAACCTCT AATGAGAATG AAAGATGAGC CTGAAGTAGA 240  
AGAGGAGGAG GAAGAGGAAG AGGAAGAAGA GAAAGAAAAG GAGGAGCAGC TCGAG 295

(2) INFORMATION FOR SEQ ID NO:1088:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1088:

GAAATGAGGG TCCCTGAAGA AGCTCTTAAG CATGAGAAGT TTACCATTCA GCTTCAGTTG 60  
TCCCAAAAAT CTTCAGAATC AGAATTATCC AAATCTGCAA GTGCCAAAAG CATAGATTCA 120  
AAGGTAGCAG ACGCTGCTAC TGAAGTGCAG CACAAAACCTA CTGAAGCACT GAAATCCGAG 180  
GAAAAAGCCA TGGATATTTT TGCTATGCCC CGTGGTACTC CATTATATGG GCAGCCGTCA 240  
TGGTGGGGGG ATGATGAGGT GGATGAAAAA AGAGCTTTCA AGACAAATGG CAAACCTGAA 300  
GAAAAAACC ATGAAGCTGG AACATCAGGG TGCCTCGAG 339

(2) INFORMATION FOR SEQ ID NO:1089:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1089:

GAATTCGGCC TTCATGGCCT ACTCAAGAAT ACAGGTCTTA CTCGTATAGT CTTTGAACAA 60  
TAGGCTGTGT GACTAAAAGA GAGACACAAT CAATTGCTTC CCAGTCAAGA AGCCAGAAAA 120  
GCTTCAAAAC CTTTCCCCCT CCCTACTCCT TGCCACCGCA CCTAAAAAAA AGAGAAATCT 180  
TTTAAGTGTT TAAATCTGT AGGAGTCTTA TGAAGAAGCA GCTTTATGTG TATTCCTTAT 240  
GGCATAATAT TAATGCATGA AAATCTGTTG CTTTTTTAAA AATTGTGGCA AAATATACAT 300  
AACATAAAAT TTATCATTTT AGCTATTTTT AATATACAAT TCACTAGCAT TAAGTATTAA 360  
TACATTCACA GCACCATTCG AACCATGGCC ACCATCATCT CCAGAACTTG ATCTTCTTCA 420  
ACGCCCCACTC GAG 433

(2) INFORMATION FOR SEQ ID NO:1090:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1090:

GACTGGGTCC ATGGGAGCAA GATTAGTGGC TGCTAAACTT GAACCGAAAA GCTTCAAACA 60  
TACCCATATA GATAAACCAG ACTGCTCAGG GCCCCCCATG GACATAAGTA ACAAGGCTTC 120  
TGGGGAGATA AAAATTGCCT ATACTTACTC TGTTAGCTTC GAGGAAGATG ATAAGATCAG 180  
ATGGGCGTCT AGATGGGACT ATATTCTGGA GTCTATGCCT CATACCCACA TTCAGTGGTT 240

TAGCATTATG AATTCCCTGG TCATTGTTCT CTTCTTATCT GGAATGGTAG CTATGATTAT 300  
GTTACGGACA CCACTCGAG 319

(2) INFORMATION FOR SEQ ID NO:1091:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 328 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1091:

GTGCAAATTG AGCACATCAT TGAAAACATT GTTGCTGTCA CCAAAGGACT TTCAGAAAAA 60  
 TTGCCAGAGA AGTGGGAGAG CGTGAAACTC CTGTTTGTGA AACTGAGAA ATCGGCTGCA 120  
 CTTCCCATCT TTTCTCGTT TGTCAGCAAT TGGGATGAAG CCACCAAAG ATCTTTGCTT 180  
 AATAAGAAGA AAAAAGAGGC AAGGAGAAAA CGAAGAGAAA GAAATTTGA AAAACAAAAG 240  
 GAGAGGAAGA AGAAGAGGCA GCAGGCTAGG AAGACTGCAT CAGTTCTTAG TAAAGATGAT 300  
 GTGGCACCTG AAAGCGGTGA TACTCGAG 328

(2) INFORMATION FOR SEQ ID NO:1092:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1092:

GATCATGAAG TCCATCATCC CAGTGGTCAT GGCTGGCATC ATCGCCATCT ACGGCCTGGT 60  
 GGTGGCAGTC CTCATCGCCA ACTCCCTGAA TGACGACATC AACCTCGAG 109

(2) INFORMATION FOR SEQ ID NO:1093:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 388 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1093:

GAATTCGGCC TTCATGGCCT ACTGGAATTC ATAAGTCTAA ATGGTTCTAT GAGTCTAAAA 60  
 TTAAAGTGTT AGCAGGGCTG GGCTTCCTTT GGAAGCTCTA GAGAATGATC TGTTTTATA 120  
 CCTTTTCCAG CTTGTATGAG CTGACTACAT TCCTTAGCTC ATGGCCCTGC TGCCACAGC 180  
 TTCAAATGAG ACAACACCAA GTTGAGTCCT CTTTAGATCA CATCAATTTA AATCTCCTAC 240  
 TATTCATATT TCCTTGTGAC TCTCCTATGC ATCCTTCCTT CTCTTCAAAG GATCTTTGTG 300  
 ATTATACTGG GCCCTCTGAA GAATCCATGA TAATCTTATC TCAAGGTGCT TAAGTTAATC 360  
 ACATTTACAA GATCTCCTTT TCCTCGAG 388

(2) INFORMATION FOR SEQ ID NO:1094:



## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1094:

```

GAATTCGGCC TTCATGGCCT AGGTGGCACA TGCCTGTGGT CCCAGTTACT CGGGAGGCTG      60
AGGTGGGAGG ATTGCTTGGG CCCGGGAGGT CAAGGCTGCA GTGAGCCGTG ATCTTGCCGC      120
TGTACTCCAG CCTGGTGATA GCGAGACCCT GTCTCAAAAA AATGCTTTTA GGGAAATTAA      180
TATGTCCTGT GCCTGTTTAA TCATTGAAAA CATTTTAATA TTTTCAGAGC CATAGAGGGC      240
AGTGA AAAAC AGAGTAGCAG AATTGATTAT ACCAGTACTA TTTATCCAAT GGCTAATACA      300
AATAAGACTC TCAGGGATAA TTCACACGTG CTTCCAAGAA CACTAGATGG CACCAATTAT      360
TTAGGATTCA GACTACCTCA GGAACAGCT GTCTTCATTC AACAAATATT TATTAAATAA      420
TGAACAAAAC AAAAATATCT GTCATTGTGG AGCAGCTCGA G                                461

```

## (2) INFORMATION FOR SEQ ID NO:1095:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1095:

```

GAATTCGGCC TTCATGGCCT AAACCTATGC AGATGCCTGT GATGAGTTCC TGGATCCCAT      60
TATGAGCACA CTGATGTGTG ACCCTGTGGT GCTGCCATCT TCCAGAGTCA CTGTGGATAG      120
ATCCACCATT GCAAGACATT TGCTCAGTGA CCAAACAGAT CCCTTTAACC GTAGTCCCCT      180
CACCATGGAC CAGATCCGGC CAAACACAGA ACTAAAAGAA AAAATCCAAC GGTGGCTTGC      240
AGAGAGGAAA CAACAAAAGG AGCAACTGA ATAGATACTG TGAAC TAACC AAACCAAAAC      300
CAACCCAGA TCTCGAG                                317

```

## (2) INFORMATION FOR SEQ ID NO:1096:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1096:

```

GCTGCAGCCA ACGCGCAGCT CCACTGGAAG AGGATGGAGA ACCTCAAGGA GGAGGAAGAT      60
GACGACTCCT CCACAGCCTC AGACAGCGAT GTTCTCATCC GGGACAAC TA CGAGCGGGCA      120
GAGAAGCGGC CCATCCTGTC TGTGCAGAGA CGTGGATCTC CCAACCCGTT TGAAATCACA      180
GACCGGGTGG AAATGGGACA AATGGCCTCC ATGTTCTTCA ATAAAGTGGG GGTCAACTTG      240
TTCTATTCTT GCATCATCGT TTACCTGTAT GGAGACCTCG CCATCTATGC TGCTGCCGTG      300
CCCTTCTCCC TCATGCAGGT GACCTGCAGC GCCACTGGCA ATGACTCCTG GCGGCTCGAG      360

```

## (2) INFORMATION FOR SEQ ID NO:1097:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1097:

```

GAATTCGGCC TTCATGGCCT AGTGAGCCAC CGCACGGGGC CTAACGATGA TGAGAATTTG      60
ATGTGACATC TGCAGGATCC CCAGCTAGTC AGCAGCATCT AGAGGGCTAG AACTCTGGCC      120
AGCTGACTGG GCCTTTTGCT AACTGTTTTT TGTCCCCTCT GTGCCGGGGT GTCAGTGAGC      180
TTTGCGGGAC AGGCTGGTCT GTCGTGCCTT CAGCTCAGGG AATGTGGCTC CCGAGCATAG      240
GGCTGGACTG AGAGGCGTTA GGTGAGCCAG AGAAGGCCTC AGACACAGGG CTTAGAGAGG      300
GCTCCCTCGA G                                     311

```

## (2) INFORMATION FOR SEQ ID NO:1098:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1098:

```

GAATTCGGCC TTCATGGCCT ACCTGCAGCT CTACAATATA TTTTCAAAC TCTTGATATT      60
GAGAACAAAG GATACCTGAA TGTCTTTTCA CTTAATTATT TCTTTAGGGC CATAAGGAA      120
CTAATGAAAA TCCATGGACA AGATCCTGTT TCATTTCAAG ATGTCAAGGA TGAAATCTTT      180
GACATGGTAA AACCAAAGGA TCCTTTGAAA ATCTCTCTTC AGGATTTAAT CAACAGTAAT      240
CAAGGAGACA CAGTAACCAC CATTCTAATC GATTTGAATG GCTTCTGGAC TTACGAGAAC      300
AGAGAGGCTC TTGTTGCAAA TGACAGTGAA AACTCTGCAG ACCTTGATGA TACATGATCT      360
CTGAAAGACT AGACTGTCTT ATATTATGAG ATACTTGAAT GCTGCATGTA AAGCCTTTAA      420
AGCAAAAAAC CTCGAG                                     436

```

## (2) INFORMATION FOR SEQ ID NO:1099:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1099:

```

GAGAAGATGC AAGTGGACCA GGAGGAACCA CATGTTGAAG AGCAACAGCA GCAGACACCA      60
GCAGAAAATA AGGAGAGTC TGAAGAAATG GAGACCTCTC AAGCTGGATC CAAGGATAAA      120
AAGATGGACC TACCACCCCA AGCCAAGAAG GCAAAAGTGA AGACCAGTAC TGTGGACCTG      180
CCAATCGAGA ATCAGCTATT ATGGCAGATA GACAGAGAGA TGCTCAACTT GTACATTGAA      240
AATGAGGGTA AGATGATCAT GCAGGATAAA CTGGAGAAGG AGCGGCTCGA G               291

```

## (2) INFORMATION FOR SEQ ID NO:1100:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1100:

```
GAATTCGGCC TTCATGGCCT AGTCATTTTA TAGGTTAAAA AAAGGTCAAA TTGTGACAAT    60
TTCATATGGT ACAATATAAA ATTATATTAA ATATACTCGA G                          101
```

(2) INFORMATION FOR SEQ ID NO:1101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1101:

```
GAATTCGCCT TCATGGCCTA AGAAATACAT AGATCAAGTA AACTCCAAC TACTGTAGCT    60
GGAATTTGTA AACTAAGTTT GTAAGACCTC TTTTATTTCC TATGGAGTTA TTCTTTAATT    120
TACAGTTTAT TCTGTAAGTT GGGAGTAAA ATAGAGAAAA TAATAAATCT AGATGTTCTC    180
AGTGCTTTAT TCAGGAACCT TTTATCCCTC CTCCTAAGG AATCCCACT GTGACTTTAA    240
AATAGAATA AATTACTTGT GTGCATGTAT ATGCTCTGTAT TTTTACACA CATGCAAAAA    300
TATACATTGG GGGCACGTGT GTGAGAGATA TGAATGTGTG CTTATATAAA AATAGATAAA    360
GGTAACCGAA TGTATTGTAG AAACATGATT TATTTAGTTG AGGGTATTGG AGTTACTTTC    420
TCATTGTCTC TGTTGTATAA ATACACCAA TTAATCATTA TGTTATCTTA TGTTAAAGG    480
CTAGCTCTCG AG                                     492
```

(2) INFORMATION FOR SEQ ID NO:1102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1102:

```
GAATTCGGCC TTCATGGCCT AGGCCTGCGT TAATACTCTT AATTATAGAA ACAATCCTTA    60
ATTAATAAAC AAGTCCTTTC ATTGGAAAAA GAACATAATC ATTTTGTCTC CTCAGTCAAA    120
ATTCTGTTTT TGTGGTTAGA GTAATAAAAT GGTAACACCT AGGGTCTGCC ACGATCATGG    180
TTCTCACTCT GGATTCATTC CCTACCACAT CCTTATTTCC CTCCTCTTCC CCATTCCCTC    240
ACTCACCTC CTCCTTTCCT TCCCTCACTC ACCCTCCTCT TCCCATTCC CTCACTCACC    300
CTCCTCCTTT CCTTCCCTCA CTCACCCTCC CCCTTTCCTC GAG                          343
```

(2) INFORMATION FOR SEQ ID NO:1103:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1103:

```
GAATTCGGCC TTCATGGCCT AACCGGGCAA AAAAAAAAAA AAATCTTAAA AGCACTAACT    60
TACTATCAAA TCTCAAGAAA CAGAAGCAAT TTCAAAAAAT CAATACTATC CTTTGTGTCA    120
GTAACACTTT CTTCATTCTT AATGTATGAG AACAAATAAGG ACATTTTAGC TCCTTTACTC    180
TTCCTTCATT TAGTGACTTC CACATTTCTC TCACCATTTT TCCAGCCTCT GGGTGTGGTT    240
CTGATGAACC TTAAACTTGA AAGGCACAGG CCAGAACTCG AG                        282
```

(2) INFORMATION FOR SEQ ID NO:1104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1104:

```
GCGATTGAAT TCTAGACCTG TCTTACGCTT CCCTTCCTAA GCCTTGTCT ACTCTGCTTT    60
GTCTGCTTTT ATGCTTCTCT CTCTTTGTGTC TGAAGTGGTC TCTGTCCTCG TCCATGCTTC    120
AAGTCCTAAT TCAAATGCCA CTGTCTTTAT GAAGGGCTCC CTGATTGTTC CAACCAAAT      180
AAGCTTTTAT TCCTTTGAAC TCGAG                                           205
```

(2) INFORMATION FOR SEQ ID NO:1105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1105:

```
GAATTCGGAC TTCATGGCCT ACGTTTTTAT TACAAATATT ACATTAACT AAAGCTCACA    60
ACTGTTACTA TGCATCAGGA ATTAACAGTC ATTTCTCATT TGTGTTATTC TCCTATTTGA    120
TCACATATAG TGAATATCTC TTTATGGGTT AAATATCAGT TTCTTGGCCA GAATTCAAGA    180
TCTGCCCCCTA ACNAATCCTA CTTCTCCAG TACCCTTACA GCACTCCTAC CCTACTAGTA    240
ACCCTCGAG                                           249
```

(2) INFORMATION FOR SEQ ID NO:1106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 237 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1106:

```

AATCTAGAC CTGCCTCGAG ATTGTCTGCC AGTTTAATTC TTAAAACTC AGTTTAGCTG      60
TCCTTTTCTT TGGAACACTT TCCCTAATCT TCCCCACCAC CTGTTTCATCA ACATATATAG      120
AAGCACATTT ACTCTCTCAT TCTCTCTCTT TCTCTCTCCA AGTCTATGTT AGGTGTTTAA      180
CGGTTTATCA TAGGTTTATG TTTACTTATC TCCCCACTAG TCTATGAAAT CCTCGAG      237

```

## (2) INFORMATION FOR SEQ ID NO:1107:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1107:

```

GATTTATTAT AAAGCTGCAA AGAAGCTGTT GCACTCAGGA ATGAAAATTC TTAGCCAGGA      60
AAGAATTTCAG AGCCTGAAGC AGAGCATAGA CTTTCATGGCT GACTTGCGAGA AAAGCTGAAA      120
GCAGAAAGAT GGAACAGACA CCTCACAGAG TGGGGAGGAC GGAGGCTGCT GGCAGAGAGA      180
GAGAGAGGAC TCTGGAGATG CCGAAGCACA CGCCTTCAAG AGTCCCAGCA AAGAAAATAA      240
AAAGAAAGAC AAAGATATGC TTGAAGATAA GTTTAAAAGC AATAATTTAG AGAGAGAGCA      300
GGAGAGCCTC GAG                                     313

```

## (2) INFORMATION FOR SEQ ID NO:1108:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1108:

```

GCGAGAACAC CATCACCATG ACAACCAGTC ACCAGCCTCA GGACAGATAC AAAGCTGTCT      60
GGCTTATCTT CTTTCATGCTG GGTCTGGGAA CGCTGCTCCC GTGGAATTTT TTCATGACGG      120
CCACTCAGTA TTTCACAAAC CGCCTGGACA TGTCCCAGAA TGTGTCCTTG GTCAGTCTG      180
AACTGAGCAA GGACGCCCAG GCGTCAGCCG CCCCTGCAGC ACCCTTGCCT GAGCGGAAGT      240
CTCTCAGTGC CATCTTCAAC AATGTCATGA CCCTATGTGC CATGCTGCCC CTGCTGTTAT      300
TCACCTACCT CAACTCCTTC CTGCATCAGA GGATCCCCCA GTCCGTACGG ATCCTGGGCA      360
GCCTGGTGGC CATCCTGCTG GTGTTTCTGA TCACTGCCAT CCTGGTGAAG GTGCAGCTGG      420
ATGCTCTGCC CTTCTTTGTC ATCACCATGA TCAAGATCGC GCTCGAG      467

```

## (2) INFORMATION FOR SEQ ID NO:1109:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 74 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1109:

```

GAATTGCGGA AACGGTCGTT CCACTCGCTC CAATGTGGCC CCCAGGCACC TACCTGATAG      60
CCATATGGGT CGAG                                     74

```

## (2) INFORMATION FOR SEQ ID NO:1110:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1110:

```

GAATTCGGCC TTCATGGCCT AGGAATTTAG GAACCAAGAT ACTGGGGTGT TATTGTTTCT      60
AAGCTCTTTC AGTGAACAGA TCTAGGAAAT ACATGTGTGT CCTAATCCAT GAATACACAC      120
TAAAATATAA TTATTCTGT ATCTATGTCA AGCTAAACCT AAGTTCACAT TGAGGTTTCT      180
GACTTTAATA CAGTCCCACA AGGTTTCGTT TAGCTTTCCT TCCTTGCATA CCTTTGACTT      240
TCCTCTCCAG CTGTGGGAAA CTTGGCTCTC TCCATCCACC ACCCCTTCAC TATTTGTTTA      300
ACCCTTGTA C ATATATAAAG CAGCGTTGGA ACTGTCAACC TGTGTCCCAT GAGAAACTTT      360
ACCCACTAGA GTACAGCGTT TATGCAGTTC TTTTGTAGT TTTTATAGAT TATAGCCAAA      420
ACTCGAG                                         427

```

## (2) INFORMATION FOR SEQ ID NO:1111:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1111:

```

GGTGAACCCG AATCACCGAT GGATGTGGAT AATTCTAAAA ATAGTTGTCA AGACTCAGAA      60
GCAGATGAGG AGACAAGTCC AGGTTTTGAT GAACAAGAAG ATGGTAGTTC CTCCCAAACA      120
GCAAATAAAC CTTCAAGGTT CCAAGCAAGA GACGCTGACA TTGAATTTAG GAAACGGTAC      180
TCTACTAAGG GCGGTGAAGT TAGATTACAT TTCCAATTG AAGGAGGAGA GAGTCACACT      240
GGAATGAATG ATTTAAATGC TAAACTACCT GGAAATATT CTAGCCTGAA TGTAGAATGC      300
AGAAATTCTA AGCAACATGG AAAAAAGGAT TCTAAAATCA CAGATCATTT CATGAGACAG      360
CCCAAAC TCG AG                                         372

```

## (2) INFORMATION FOR SEQ ID NO:1112:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1112:

```

GAATTCTAGA CCTGCCTCGA GCTATACCTG TATCCAGTCT TGATGCACAC CAGGCTGGGC      60
ACTTTCCAGA AACTACCTCT AACCTCCAGG GTTCCCTCAT CACTCGAG      108

```

## (2) INFORMATION FOR SEQ ID NO:1113:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1113:

```

GAATTCGGCC TTCATGAAGA TTGAGAAGAA GGAGGAAAAA AAGCCTGAAG ACATTAAGAA      60
GGAAGAAAAA GACCAGGATG AGCTGAAACC CGGACCTACA AATCGGTCTA GAGTCACCAA      120
ATCAGGAAGC AGAGGAATGG AGCGGACGGT CGTGATGGAT AAATCGAAAG GAGAGCCCGT      180
CATTAGCGTG AAAACCACAA GCAGGTCCAA AGAGAGAAGC TCCAAGAGTC AGGATCGCAA      240
GTCAGAAAGC AAAGAAAAGA GAGACATCTT GTCGTTTGAT AAAATCAAAG AACAAAGGGA      300
GAGAGAGCGC CAGAGGCAGC GGGAACGGGA GATCCGCGAA ACGGAGAGGC GGCGGGAGCG      360
CGAGCAGCGG GAGCGTCTCG AG                                     382

```

(2) INFORMATION FOR SEQ ID NO:1114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1114:

```

GAATTAGCAA AGGAAATCTC AGATTGCATT TCCAAAGATG GTTGCTAGCT GCTGCCGTTT      60
CCTTTGCTAT TTCTGTCGAA TTAGCCGGCA AAATCAGAAG GCCATGTTTG AGCATCTGAG      120
TTATCTTCTG GAGAATAGCA GTGTTGGCCT AGCCTCCCCG TCGATGAGGG GATCCACCCC      180
GCTGGATGTG GCAGCTTCCT CTGTGATGGA CAACAATGAG TTAGCGCTGA GCTTAGAGGA      240
ACCAGACCTC GAG                                     253

```

(2) INFORMATION FOR SEQ ID NO:1115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 76 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1115:

```

GAATTTTTTT TTTTITTAAG GAAAGAAAAC TAGGGCGATG CAATGTCCAG ACAGAAGCCG      60
GGGGCCGGGG CTCGAG                                     76

```

(2) INFORMATION FOR SEQ ID NO:1116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 70 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1116:

GAATTCGGCC TTCATGACGA CCGCGTCCAC CTCGCAGGTG CGCCAGAACT ACCACCAGGA	60
CACCCTCGAG	70

## (2) INFORMATION FOR SEQ ID NO:1117:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 526 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1117:

GAAATGAAA AGTTCTGTCT TTGATGAAGA CAAAACCTTT GTAGCAGAAA CATTGGAAAT	60
GGGTGAGGTT GTTGAAAAGG ATACAACAGA ACTCATGGAA AAACCTTGAGG TAACCAAGCG	120
AGAGAAATTA GAGCTGTCAC AGAGACTGTC TGATCTTTCT GAACAATTGA AACAGAAAACA	180
TGGTGAGATT AGTTTTCTAA ATGAAGAAGT TAAATCTTTA AAGCAAGAGA AAGAACAAGT	240
TTCATTGAGA TGTAGAGAGC TAGAAATCAT TATTAACCAC AACAGGGCAG AAAATGTACA	300
GTCATGTGAT ACTCAAGTAA GCTCTTTATT AGATGGAGTT GTGACTATGA CAAGCAGGGG	360
TGCTGAAGGA TCAGTTTCTA AAGTAAATAA AAGTTTGGT GAAGAATCAA AAATAATGGT	420
GGAAGATAAA GTTTCTTTTG AAAATATGAC TGTTGGAGAA GAAAGTAAGC AAGAACAGTT	480
GATTTTGGAT CACTTACCAT CTGTAACAAA GGAATCTTCA CTCGAG	526

## (2) INFORMATION FOR SEQ ID NO:1118:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1118:

CGATTGAATT CTAGACCTGC CTCGAGCCGA CCTACTCCAC AGCTGTCTTG ACTGTGTAAG	60
CGAGATGATG ATTAGTGATC AGACGAAAGG ATTCCTGTCA TTGGTAACCC TCTCAAAGTA	120
TTTGGAAGAAC AGTTCAATTT TCATCTATTT CAGAAGCACG CCGTGGTGTC TATTGAGGCT	180
CACCCTCGAG	190

## (2) INFORMATION FOR SEQ ID NO:1119:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1119:

GAATTCGGCC TTCATGGCCT ACCATCCTGC ACTCAACCAA TCATCTGATG CTGACTCAGA	60
AGCTCTGTTT GGAGTACCTA ATGATAAGAA TTTACTGTGG GCTTATGCTG TTATCGGTAC	120



TTACATGTTC TTAGTTTCTG TCATTTTTTT TTGTCTGTTT TTAAAGAATA GCTCAAAGCA	180
AGAAAAAGCA AGAGCATCTG CTGAGACATT TCGAAGAGCA AAATATCACA ACGCCCTTCT	240
TTGTCTCCTT TTTCTGTTCT TCTTTTTTTA TGTTGGAGCT GAGGTAACAT ATGGCTCTTA	300
TGTTTTCTCA TTTGCAACCA CCCATCTCGA G	331

## (2) INFORMATION FOR SEQ ID NO:1120:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 352 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1120:

GAATTCGGCC TTCATGGCCT ACAGATTGTC ATCTTTACAA CCAGAAGCTC AGGGAGAAGT	60
TGAAGGAGGA GGAGAACACA GTGGGTATGT TCAGATTGCT TTTGGGTACC CTTGATCCAG	120
CCACATTGTC TACCCTAGAT GGGTGCTCAT GGTACTTCTT GGTGGCATT CAATAATAGG	180
TTGAGTTGTA TACCGTCTGT CTTTACACTA CATTATGAAA ATGAGATTAT TAAATAAGAA	240
TTTGTATGTA GCTGATAAGC TAGTAGAATT GGCACATGAT CCCTTTTATA CCCAGCCCTC	300
CTGTCTGGTG TGCTTGAGGT AATAATAACC CTTTTTATAC CCAAACCTCG AG	352

## (2) INFORMATION FOR SEQ ID NO:1121:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 484 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1121:

GAATTCGGCC TTCATGGCCT ACCAATCTCT TTTACTGAGC ACAATGTGGG TAAAACTGCT	60
CTCTATAGTA GCAGAATTTT GTTTTCCCTT TTTCTAGTT ACTGATGAAG AGACAGCTTC	120
AGATGCTCTG GAGAGAACT CTCTATCCTC TCAAGACCCA CAGCAGCCCA CCAGTACTGT	180
CTCAGTAACG GAAGATTCTA GTACATCGGA GATTGACAAG GAAGAGAAAG AACAAACCAC	240
TCAAGATCCT GACTTGACCA CCGAAGCAAA TCCTCAGTAT TTAGGACTGG CAAGAAAGAA	300
AAGTGGCATC CTGCTGCTCA CGCTGCTGTC CTTCTCATT TTCATACTCT TCATCATAGT	360
CCAGCTCTTC ATCATGAAGC TGAGGAAAGC ACATGTGATA TGGAAGAGAG AAAACGAAGT	420
TTCAGAACAC AACTAGAAA GTTACAGATC AAGGTCAAAT AATGAAGAAA CATCATCGCT	480
CGAG	484

## (2) INFORMATION FOR SEQ ID NO:1122:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 247 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1122:

GAATTCGGCC TTCATGGCCT ACTTATGTTT TTCTCATTTG TTGACCTAAA TGATCTTTAT	60
---	----

CCAAACTATT CCAAAATCTG AATTTCTGGG TCCTTCTTTC TTTAAATAT TCTGTTCAAT	120
ATTAAACAAA CAAACGTTTG AGAACATGAG TAACCTTTTG ACTTTATCCC GTATCTGTTT	180
GCTAATGTTC TGTTCATGT CTTCTTGTC AGAACACACT GTTGCAGCAG CTAGGAGTGC	240
ACTCGAG	247

## (2) INFORMATION FOR SEQ ID NO:1123:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1123:

GAATTCGGCC TTCATGGCCT AGGAGGAAGC TAATAAGAGA CTGTCAAGAT TGTATACCTT	60
CTTGGTTTTCT TTTAAGAATT TGTGCTTTT CTACTATTAC AGCAAAGCAG CATTTTGTTA	120
CTGACTGCCT AAAATCACTT AATCTCAGGT GAACGCATCA CTTGCCAAAC TGTGGAATG	180
CTATTTGTGT TTTGTTGCAC TGTTTTTTTC GTTTGTTTGT TTGTTTATTT GGTGCGCTTT	240
TTGGAGAGGG AAATTTGGAA ACGGGACACA CTCGAG	276

## (2) INFORMATION FOR SEQ ID NO:1124:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1124:

GAATTACTAG CAGAGATCAG TGCTATAAGG GAAAAGGAGA TTGATTGAA AGAACTGGA	60
AAAAGAGACA TTCCCATGAT GGAGAAAGTA TCAGGAAAGA TGGCTGTTGT TGAAGAAATG	120
GAGGCAGATT TGAAAGAAAC TGGAAAAGAA AATTTTAGAG AGAGAGGATC TGAAGAGATC	180
TGTGTTACTG AGGAAAAGGT GGCAGAAATTG AAACAAACTG GAAAAACAGA CATTCTCCA	240
AGGGCCCTCG AG	252

## (2) INFORMATION FOR SEQ ID NO:1125:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1125:

GAATTCGGCC TTCATGGCCT AAACAGAATA TTCTGAGGCT AAAAGAAAT ACACCCCGC	60
AAAAATCAAT ATAACATGA TTAAGTACAC AAAACATGCA GCCCATAAAA CATATTTTAC	120
CTATGAACT GAGACTGAGG AATTTAACAG TAAACAGTCA TTTGTTAAAG AAATATTTTT	180
ACAATTTATT GCCTATGTAT AAGGCAGCAG GCCTGTACTC TCTGTATTT TCAATCTCTT	240
CCCCTACTCT GGCTCTTCCT CAGCATATAA ATATGTTTCT ATCCCTACCT TATGGAAACC	300
ATCCCCATC CCTCGAG	317

## (2) INFORMATION FOR SEQ ID NO:1126:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1126:

```

GAATTCGGCC TTCATGGCCT ACTTTGTAAC TGTGAAATAC TCTCCAGGAT TTAAAAGGCT      60
GTGGAGCTCC AGATAAGAA TCGTTTATCT TTCTTCTGAA GAAATTCCTT TGGTTACAAG      120
TTTACCCCAT AAACGGCAAC ACACTCACCT CCATCCAAGA CAGACTCAAG GTGGAGGAAG      180
CGTGGAAATG TGCTTCCGGA CAAAGCTCTC AGTATCCTGG GTGCCATGTG TTCTTCTACT      240
CAGCCGTGTT TTTTCTACTG AGACAGACAA ACCCTCAGCC CAGGACAGCA GAAGCCGTGG      300
GAGTTCAGGC CAACCGGCAG ACCTGCTACA GGTCTCTCTCT GCTGGTGACC ACCCACCCCA      360
CAACCACTCA AGAAGCCACT CG                                     382

```

## (2) INFORMATION FOR SEQ ID NO:1127:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1127:

```

GAATTCGGCC TTCATGGCCT ACAGACTTCT GTGTGTGGGA CTGAAGCACC TGTTGTGCAA      60
TCTGAAGAAG CTCTGGTTGG TCAGCTGCTG CCTCACATCA GCATGTTGTC AGGATCTTGC      120
ATCAGTATTG AGCACCAGCC ATTCCCTGAC CAGACTCTAT GTGGGGGAGA ATGCCTTGGG      180
AGACTCAGGA GTCGCAATTT TATGTGAAAA AGCCAAGAAT CCACAGTGTA ACCTGCAGAA      240
ACTGGGGTTG GTGAATTCTG GCCTTACGTC AGTCTGTTGT TCAGCTTTGT CCTCGGTACT      300
CAGCACTAAT CAGAATCTCA CGCACCATCT CGAG                                     334

```

## (2) INFORMATION FOR SEQ ID NO:1128:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1128:

```

GAATTCGGCC TTCATGGCCT AGTCTGTCCA TCTGCTTTCT CTGGACCTCC TTCTCATACT      60
TTGAATTTTT TAAGTAGTTT GTCCCTCATA TGATTTTTTT TCTATTCCTT TTCCCTTCC      120
TGTCCTTCCT TCACTCCTTT CCCTCCCACC TCCCTCCCTC CCTTCCTCTC TCCTTCCTT      180
CCTTCCTTCC ATCCAACCAT CCATCCATCC ATCCATCCAT CCATCCATCC ATCCATCTAT      240
CCTCTCTCGA G                                     251

```

## (2) INFORMATION FOR SEQ ID NO:1129:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1129:

```

GAATTCGGCC TTCATGGCCT AATTTCATGT NCCTTTGAGC TATCTTTCCA TTTTGTAGGA      60
ACACCGTCAC AGGAGACAAT TTCATGGACC TTTGAGCTGT CTTTCCATTT TGTGGGAACG      120
CCGTCACAGG AGACAATTTT ATGTGCCTTT GAGCTGTCTT TCTATTTTGT AGGAACGCTC      180
TCAGAGGGGA CAATTTCATG TGCCTTTGAG CTGTCTTTCC ATTTTGTAGG AACACTCACA      240
GCAGTGCTTG GGGTTCACTG TTACCTAAAT CCCATGATGG GTGAGAAGAC TGAATGGGAC      300
GTTTATTTTT TGTGTTAAAA AGCCACGCA AATAGAGTTT AAAATAGTCT CAGTGAGCTG      360
GGCATTCTCG AG                                     372

```

## (2) INFORMATION FOR SEQ ID NO:1130:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1130:

```

GAATTCGGCC TTCATGGCCT AGTGCCTAGT TACAAGGTTT TATTACAGCA GTATTTCTAA      60
ACATTTGGTT AGTCTGTCTC TGCTTTTCCC ACCATAATTT TCTAGCACTT GTAGCTCACC      120
TTATCTCCCA CTTCCTTTT TAAATAGAAA ACAGGCTTGT TCTGTTTTGA CCAGGTATAA      180
TCTTTTGCTC AGACTGTCTC TAAAGCCAG AAAACTATTG CTCTAGTGGT CCAATGAAGT      240
GTTCCCCATT GAAAGTTTGC CTCATGTCAC TCGAG                                     275

```

## (2) INFORMATION FOR SEQ ID NO:1131:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1131:

```

GAAAATTGAG CCTATGTTGG AGACACTGGA GAATCTTTCC TCTCGCTGCG GTATGCCACC      60
ACTGATCCCT GCTGAAGTAG ACAAGATCAG AGAGTGCATC AGTGACAATA AGAGTGCCAC      120
CGTGGAGCTA GAAAACTGC AGCCATCCTT TGAGGCCTTG AAGCGCCGTG GAGAGGAGCT      180
TATTGGACGA TCTCAGGGAG CAGACAAGGA TCTGGCTGCA AAAGAAATCC AGGATAAATT      240
GGATCAAATG GTATTCTTCT GGGAGGACAT CAAAGCTCGG GCTGAAGAAC GAGAAATCAA      300
ATTTCTTGAT GTCCTTGAAT TAGCAGAGAA GTTCTGGTAT GACATGGCAG CTCTCCTGAC      360
CACCATCAAA GACACCCAG GACTCGAG                                     388

```

## (2) INFORMATION FOR SEQ ID NO:1132:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1132:

```
GAATTCGGCC TTCATGGCCT AAAGTTATAC CAGCTAAAGT GCAGTAGTGT CACTTTTTC      60
CTGTCAATAT ATAGAGACTT CTAAATCATA ATCATCCTTT TTAAAAAAA AGAATTTTAA      120
AAAAGATGGA TTTGACACAC TCACCATTTA ATCATTTCCTA GCAAAATATA TGTTTGGCTG      180
AAATTATGTC AAATGGATGT AATATAGGTG TTGTTTGCTG CTTTGTATGG CTACGTTTGG      240
GAGAGAGCAA TCTTGCTGTG AAACAGTGTG GACTCGAG                                278
```

(2) INFORMATION FOR SEQ ID NO:1133:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1133:

```
GAATTCGGCC TTCATGGCCT AATCATTATA ATTTAGTTTG AATTCTTAAA ACCCCGTTAC      60
TAGAACTTAT GTTTAAATTT ATAAATTATA AATAGTTATA AATTATAAAT AAATTGAGAC      120
TGAGGCAGGA AAATCACTTG AACCCAGGAG GCAGAGGTTG CACTGAGCCA AGATCAGGCC      180
ACTGCACTCC AGCCTGGGTG ACAGTGAGAC TCCATCTCAA AAAAAAAAAA AAATTATATA      240
TAAATTCCTG TAAGTAAGTT TGAAGAAAAA CCGATTCAA TAGTATATAT TCAGCTTTAT      300
AAATTCTGTT AAGCATATTT GAATGAGAAT TTATTAAAAT GGTATATATT AAGTCTACGG      360
TTCTCGAG                                368
```

(2) INFORMATION FOR SEQ ID NO:1134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1134:

```
GAATTCGGCC TTCATGGCCT ACGTCTGATT CTCTAAGTTC ATTTCTTGGT GGTGGAGGCT      60
CATTCTTCTT GGAGTCACTG AAATTTTGGG GATATCTTTC GAAGCTTGGA TCTTCCCTTC      120
GTGCAGTAGG TCGTGCTTTT TTCCCTCAC TTTGACCAAC AAAGCGATCC CGCCTTTCAA      180
AAGATGAAGA CTGTACTGCT GAACTCTCAG GAAACCTGCC CCTCTCTCGG TGATCAAAGT      240
CATTAAATCT GTTCTGTTGG CGAGAGTAGT CGGATCCATG GCCAAATCGT GCATCTGTAT      300
CTAGAGACAA CTTTTTATTC TCGCTCCAGT AAGGATCATC TCGCCTATGA TCTACATCAC      360
GTGGGCGTTT CAAGGAATTC CTTTTTCTT GTTCATAACG AAGCTGCTGT TGTTGCCTTC      420
TGAGTTCCTC TCTTCTCGA G                                441
```

(2) INFORMATION FOR SEQ ID NO:1135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1135:

```
GCGATTGAAT TCTAGACCTG CCTCGAGCAA GAAACGTTTT CTAAGTCAAA GGAATAAATC    60
CAAAGCCTCT AAGACTGGGT GAGAGAGAGG AAAAGAAATG ACGGAAGCAC TCGAG      115
```

(2) INFORMATION FOR SEQ ID NO:1136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1136:

```
GAATTCTGGT TTTACTGAAG CTATGTTAGA AACGTCATGT AGAAACTCTT TAGATACTGA    60
GCTTCAGTTT GCTGAAAATA AGCCAGGCAT GTCTTTGTTG CAGGAAAACG TAAGCACAAA    120
GGGTGACGAT ACAGATGTCA TGCTCACAGG TGACACTTTG AGCACCTCAT TGCAGTCTTC    180
CCCAGAAGTG CAGGTACCTC CTACCTCCTT CGAAACAGAA GAAACGCCCC GTCGGGTACC    240
CCAGATCTC GAG                                     253
```

(2) INFORMATION FOR SEQ ID NO:1137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1137:

```
GAATTCGGCT TCATGGACGA GGAGATCGTG TCCGAGAAGC AAGCCGAGGA GAGCCACCGG    60
CAGGACAGCG CCAACCTGCT CATCTTCATC CTGCTGCTCA CCCTCACCAT TCTCACAATC    120
TGGCTCTTCA AGCACCGCCG GGCCCGCTTC CTGCACGAAA CCGGCCTGGC TATGATTTAT    180
GGTCTTTTGG TGGGCCTTGT GCTTCGGTAT GGCATTCTAT TTCCGAGTGA TGTAAATAAT    240
GTGACCCTGA GCTGTGAAGT GCAGTCAAGT CCAACTACCT TACTGGTAAA TGTTAGTGGA    300
AAATTTTATG AGTATATGCT GAAAGGAGAG ATACTCGAG                                     339
```

(2) INFORMATION FOR SEQ ID NO:1138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1138:

GAATTCGGCC	TTCATGGCCT	AATTCAGAGG	TGGTGGGACC	TTGGCTATGA	TTCTGTTCAA	60
GCCCCCTAAT	TTTACAGATT	TTATGGAATT	GAGCAACAGA	CAAGATGATT	TTGCCTAGGT	120
TCATAAACAG	GAAAAAAGGA	GAGCCAGGAA	AGAACTCAAT	TGTTGTAAAC	TGCTGTCTTG	180
TCTTGATGTT	CTGTCTTCAT	TCATCATCCA	GCCTTTCCTA	GGAGTGTGAG	AGATAGACCC	240
AGGTAGAAGT	GGGCTGCCCC	TGGGGGGCTT	AGCACAAACAG	AAATTTATTC	TTTACTGTT	300
CTGGAGGCCA	GACATCTAAA	ATAAAGGTGT	TGATGGGGTC	ATTCTTCCTC	TTGAGGGCTC	360
GAG						363

## (2) INFORMATION FOR SEQ ID NO:1139:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1139:

GAATTCGGCC	TTCATGGCCT	ACTTGTAGAA	TATTGAGCAA	TTTGTGTGAA	GTGGGAAGA	60
TGAAAGAAGT	CAGAAATTGA	AACGGAAGAA	TGAAGAAAAG	AAATAAAAAT	GAAGTTAAGA	120
TAAGAAGTAA	TCTGGAATCA	GAAAGCACTA	CGCTAAGAAT	CCCGTTCTGC	TTCCAGAAGT	180
GGAAGTGCTC	ACGGATCGGG	GAAATCTGCA	AGGCATACCC	CTGCAAGGTC	TCGCTCCAAG	240
GAAGATTCCA	GGCGTTCCAG	ATCAAAGTCC	AGGTCCCGAT	CTGAATCTAG	GTCTAGATCC	300
AGAAGAAGCT	CCCGAAGGCA	TTATACCCGG	TCACGGTCTC	GCTCCCGCTC	CCAAGGACGA	360
TCTCGAG						367

## (2) INFORMATION FOR SEQ ID NO:1140:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1140:

GAATTCGGCC	TTCATGGCCT	ACACCCTCAC	CACCCAAGGG	GTCATCATCT	CTGGCCACCA	60
CTCCACCAGA	TGGGCAGAGC	AGCTATGACC	GCCACCCAGC	CCTCCCGCTC	AGGCCACAGC	120
CGGAGCCTCC	GCATTGCCCC	CACCCCCATT	TTCCAGGGGG	GTTGTAATTT	ATAAGCTGAC	180
GAAGGTAGCC	AGACTTCCGG	AGGACTGACC	ATCTCTCACT	GTCCTCCCCA	CCTTCTTCCT	240
CACTCACACA	TTTTTTGTAC	ATCTGGGCCC	TTAGTTTTTA	TTCTGTTTAT	TATATGTCTC	300
TGTCTCTCTC	TATTGTGTGT	GTGTGTGTGT	GTGTGTGTGT	GTGTGTGTGT	GTGTGTGTGG	360
TGCAGGAGTG	CCACCCCCAG	GGCCTCGAG				389

## (2) INFORMATION FOR SEQ ID NO:1141:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1141:

GAATTCGGCC	TTCATGGCCT	AGCAGCACTA	ATCTTGATGG	GACAGAAAAT	TTCAAATGAA	60
GAGCTTTCCC	TCTTTTTTTC	TTCCTTGGGG	GCATGCCAGC	TTGTGCTTCT	ATGTCAGTAG	120
CCTTGTAGTT	GCCATTCCTG	GCCCAGACAC	TTGCATGCAG	TTTGGTTTGT	CCTCCACCAC	180
TTTGATCATG	TTGCCCATGG	TCTAGACACC	TCCGTGTCCT	TGTTATCATG	GCATATAGTC	240
TGTATGCCTC	TGCTGGATTT	ATAAGCGGCC	CCATAATAGC	CTTCCTTTCT	GGTTACCCCC	300
TTGATCTCGA	G					311

## (2) INFORMATION FOR SEQ ID NO:1142:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 530 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1142:

GAATTCGGCC	TTCATGGCCT	AAAAGATCAG	ATTTTGTGTCAT	TTAAGACACA	TATTTTACAT	60
TCAAAAATGT	AAAGTCAGGG	TGTGTCTTAA	AATCCATTGG	TGTTTTAATC	ATGCTTAAAC	120
ATGTGACTGC	TGTTGGCCAG	GATACAGTTG	TGGTGGTGTC	GTCAGTATCT	GAGCACATGT	180
GAACCTNGCC	ATGACTATTC	ATATTGTCTT	CTCTTAAACT	GAATTATGTC	CATGGTTGCC	240
AACATGTACT	GTCCATAGTT	GCCACCATGT	ATTTAGGTTG	TCATTTAAAA	TGTCCTCAAA	300
AAGATTTTAC	CATGATTCTC	CATCAAAATA	GAAAGCTATT	TTGTATGAAG	AAGAAGTCAG	360
ACCAGAAAAG	TCTGATAAAA	ATAATCTCTT	AAATAAGTCT	ACATTAGGTC	TTTCAATTTG	420
TATAAATGT	AAATTTTGAA	TTATAAGAAA	ACAATTTGTT	ATACTGTAAT	TGGTAGCATT	480
TTTTCTTAGT	AGTGACAAA	ATAATGTGTA	CCTTACATTC	AAATCTCGAG		530

## (2) INFORMATION FOR SEQ ID NO:1143:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 615 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1143:

GAATTCGGCC	NNCATGGCCN	ACCTATGTNA	NGNATTTCNN	CTCCATTTNC	CCNAGGGTTC	60
TTTCTGTTC	TTAGAAATGT	TTTGTGATTT	TGCTTCAGAC	ACAGTTTGTC	TACTTCTNGT	120
AAGCATTGTT	CTTAGATNGC	TGGCTTTATA	TCTATCACTC	CCTTGCTCAT	CTGCCCATCC	180
ATCTATCCAT	CCATCCATCC	ATCCATCCAT	CATCCCTCCA	TCCACTTGCT	CATCTGCCCA	240
TCCATCCATC	CATCTATCCA	TTCATCCAGT	CCATTACCCA	CCCACCATCT	ATTATCCATC	300
CATCCATCCA	TCCATCCATC	CATTATCCA	CTCACCCATT	CATCCATCAT	CCATCCACTC	360
ANCCATCCAT	TCATTAGTC	ACCCTTCATC	CATTCACTCA	CCCATCCTTC	CATCCACTCA	420
TCCAATCACC	CATCCATCCA	TACATCCACT	CATCCATPCA	CCATCCATAC	ATCCACTCAT	480
CCATTATCC	ATCCATCCAC	CCACCCAGAC	GTCCGTCCAT	CNATCCATCC	ATCCATNCAT	540
CCTTCTATNN	NNTCTGCCAA	CAATCCANAC	ACNTGTCCNT	CNATCCCTTC	CAACCACTCA	600
CCCAGCACAC	TCGAG					615

## (2) INFORMATION FOR SEQ ID NO:1144:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs



(B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1144:

GAATTCGGCC AAAGAGGCCT AACCGCGGCC GCTACTTCGG CCTCTTTGGC CCTCGAG 57

(2) INFORMATION FOR SEQ ID NO:1145:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 227 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1145:

GAATTCGGCC TTCATGGCCT AGGTTTTCTT TTATTTAAAA GATCATTAC AAAATACCAT 60  
 ATCCATAGAT TTAATTTCTG TCATATAGCT GAATGTGTTA AGTGTGTTGA ATTCCATTCT 120  
 TACATTTAAA GGTCAACTGG ATTGCCCAGC AGTTTAGATG CATGTGTTTT GTTCTTTATC 180  
 TTATCCACAT TGAAGATGTA AGTATTGAAT TCTAGACCTG CCTCGAG 227

(2) INFORMATION FOR SEQ ID NO:1146:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 447 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1146:

CTCGAGTATC TCCTCCTTTC TGATATCCAG TTAGGTGGT CCAATTTTTC CATCTCGGCA 60  
 TACAGCAAAT TCTTCTGACT TTGCATAGGC AGATTCCTTT TGTCCAACCC TGGCTTTAAC 120  
 TCTGACCCAA AGAGAATTG ATGGATCACC AACATGATCA GAAATATTAC AATAATGATG 180  
 AGAAATATTG ATGCAGGCAT CAATCCATTC TGAATCTTA ACACCATAGT TCTTTACCTC 240  
 TACGGTAAAA ACAGGGACCT GTGGCATGAT CTGGTACTCC CAATATACGA TAGGGTTCAT 300  
 GTTATAGGAT TCAATTGTAA CATTAGTTGG TGTAGGCACT GAGGACGGCC CCAGATCCGC 360  
 GGTGCCCCATC TCAGCCCTGC TCACACCCTG CATGACAAGG GGTAGGAGAA AGAGGAGAGC 420  
 CATGCTGCTA CCGACGGTCG CTGGCTC 447

(2) INFORMATION FOR SEQ ID NO:1147:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 271 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1147:

```

GGGCGCCATG TTTGCCATCT CAGGTCCAGG TTTCTCCCGG ACTTCGAAGA GCTCATTATC      60
GGGTCTGATT TTCAGCTCCT TCTGCAGAGT CTTCCGGAGC TCCAGCATCC GCTGCTGCAT      120
CTGCTTTATG GTCTTATTTT TCTCCAGAAG TTGCTGCTCC AAGTCCTGTT TCTCCTTCTG      180
TAGCTGTGTG AGATCCATGG CCCCACCTC ACCATTGGT GTTCTTCCTG CAGTTGGAAG      240
CTGGAACACA GGGTCTCGCA TGGCCCTCGA G

```

## (2) INFORMATION FOR SEQ ID NO:1148:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 298 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1148:

```

GGATTGGGGA GGGAGTGTGC GAATAGGTGT GGGTGACAGA CATCAAGTAC TTAACAGGGT      60
AATAGAATAT CACAAGGCAA GTGGAGGCAG GGCGAGATCA CAGGACCACA GGACCAAGGC      120
AAAATTAAAA TTGCTAATGA AGTTTGGGCG ACCATTGTCA TTGATAACAT CTTATCAGGA      180
GACAGGGTTT GAGAGCAACC GGTCTGACCA AAATTATTAT GGCGGGAATT TCCTCCTCCT      240
AATAAGCCTG GGAGCGCTAT GGGAGACTGG AGTTTATTTT ATCTCTGCCT GCCTCGAG      298

```

## (2) INFORMATION FOR SEQ ID NO:1149:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 332 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1149:

```

GAATTCGGCC TTCATGGCCT ACGGCATTTC AGCGTCAAGT GCACTTAGCG GGGTACCCGG      60
CTCCCCCAGC CCCACACCCC GTCCTGGGTC TCAGGGTGGT TCCAGCTTCT CCTTGGGCAG      120
CCAGAAGTTG GAGTCCCATC CCCCANNNGA NATTTTTTTT TTTTTTTTTT TGTGATCAGG      180
GAGTGTGTCC AACGTAGCCC CCTGGCCTGT GCAAGCCCTG ACTCCCTCAT GGTGCCTCGG      240
AGAGTGGGGA GCATATTGGG CTGGGGTAAG CACTAGACCC AAGTAGACTG GACACAAAGG      300
GCTCGCCCAG GGCCTGGCG CCACCCCTCG AG

```

## (2) INFORMATION FOR SEQ ID NO:1150:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1150:

```

GCGAGGCAGG GAACTCACT TCACGTCTCT TTCCTTGTAG AGCATCATGC TTATTTCTGG      60
CTCACTCACA TCTTTGTCTC GGGAGTTCTC TGCCGAGCCA TTGCCCCCTA CAGCAGAGAG      120
CACAGCTGGC TGCACTAGTG CTGAAGGAGC CAGCCCCAGA GCAGGGCATT TCCAGGGGCT      180

```

CTTGTCCTCAG AGCGGCAGGC GTTGTGTGCA GAGAACGCCC CTCCCACGCA GCACAGAGAA	240
CGCGGGGTGG GTGTGTGGCT CCGGGCCTGT GGGGCTTAGG CTGCCTGAAC CACCGCCGAC	300
TGGCACCATG ACTCGGCATT CCTGGAAGTG CCTTACCAAG TTGTTGTTGT TGTTTTGTTG	360
TTTTTTAAGA GACGGGCTTG CTCTATCATC CAGGCTCGAG	400

## (2) INFORMATION FOR SEQ ID NO:1151:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1151:

GAATTCGGCC TTCATGGCCT ACCCAGACAA ATACCAAGTT TATTTACAA AACTAGGAA	60
GATGGGTTGA GGGTGGAGGT GGGGGACACA GGTGCGCAGC TGCACAGAGT CAGCAGCAGC	120
AGCCTGCTCC CCGCACTGAG GACTCGGCCT GGANTGCAGT GCCTCCAAAT CAACACGCAG	180
CAAGAGGGGA GTGCAGGGAG GGCCCTGAAC ACCAAGCCTC TGAAAGGCTA AGGGACACAG	240
CTCCAGCTGT CCCAGGAAAA CCAGCAATAA ATAAAAGTGA GGCACGGCCC CACCCACACA	300
TATCATCTAG TCACCCATCT TCACTCTGG	329

## (2) INFORMATION FOR SEQ ID NO:1152:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1152:

GAATTCGGCC TTCATGGCCT ACCCATAGCC ATGAGCATGA CTGGCTGCCA GCTCTTAGTC	60
ACCAAATGCC ATTCTCCGCT GAAAGAAGCA AGGGCTTTTC AGAGAATAGA CTGAGCACAA	120
AAATGACAAT GGTAATGGAG TAGAACACCT TGACTTTTAA AAGTCCACGA GTCCACAGTG	180
ATGCCTAAGG GAAGTAGGGA GGAAAGCTCT TCTTTACAAC ATCTTCCAGC TAACAGATGG	240
AAAAGGAATG ACAAATGAA AAATCACCAT ATTGCAACTC TCAATAAAGT AACTGATTCA	300
GGCATATCTC GAG	313

## (2) INFORMATION FOR SEQ ID NO:1153:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1153:

GGGCTCCTCG CCAAGGAACT CGTGGCAGAA GAGGGCAGCA GTTGGCAGTA GCTGCCGATG	60
TCTGTCCCA GCTCCACCAT TCCTCCCTGT GGCTGTGCCG TGCTCGTGGT TTCAGTGTCC	120
GTGTGTCCAT GTGTCTGCCC TTCAGGAGCT CGCAGCTGGT GTGCTTGGCG GTCCAGGCC	180
TGTGTAGTGT CTCTCCCTG CTGCGGGCGC CCCCACCCG ATTCTCTCC CCAGAAGCGG	240

TGGGATGGGC CCCCATGAAC TGCAGCAGCA TGCTGAGGTG TCCATGTTGT CTGCCTTTGT 300  
ATAAAGAAAC AGCCTCTACT CGAG 324

## (2) INFORMATION FOR SEQ ID NO:1154:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 327 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1154:

GCGAGTTCAG CGGAGAAAAG AAAAAGCAAC GTTTAATTCT AGAAGGCCTC CTGTCCCTGC 60  
 CTGCTCTGGG TGCTCATGGA ATCAGCTGCT GCCCTGCACT TCTCCCGGCC AGCCTCCCTC 120  
 CTCCTCCTCC TCCTCAGCCT GTGTGCACTG GTCTCAGCCC AGTTTATTGT CGTGGGGCCC 180  
 ACTGATCCCA TCTTGGCCAC GGTGGAGAA AACACTACGT TACGCTGCCA TCTGTCACCT 240  
 GAGAAAAATG CTGAGGACAT GGAGGTGCGG TGGTTCCGGT CTCAGTTCTC CCCCAGAGTG 300  
 TTTGTGTATA AAGGTGGCGC ACTCGAG 327

## (2) INFORMATION FOR SEQ ID NO:1155:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 504 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1155:

GAATTCGGCC TTCATGGCCT ACGAGCCCTT TGCCTCCAGT AGTCCCACCT TTCTGGAAGT 60  
 AACTGATATT CACCTTACAC AAATGGATTG ATGTCTCATG TCTCCCTAAA ATGTACAAAA 120  
 CCAAGCTGTG CCCACCAACC TTGGGCACAT GTCATCAGAC CTTCTGAGGC TGTGTCACGG 180  
 GTGCACGTCC TCAACCTTGG CAAAATAAAC TTTCTAAGTT ATCTGAGACC TGTCTCAGAT 240  
 TTTTGGGGTT CACACACCAT ATGTCTGAAT ACTGTCTTTT CCTATCTCTG GCTCCATCCC 300  
 ACATTGTAAG GGGCCTTGCA CACACAAATG TGGACATTCC AGCCTGCACA CCTAAGCATC 360  
 GCCTCCACTC CCACCCTTCC AGCGGATGGG TGTGAAACT GGCAGTGTG TTCATCTTCA 420  
 AGATGATGTA TACAGGAAAG TGGTCCAGGC AGATCCTGTG AGCAGGCTTG GGCCCACTTG 480  
 GGAAGAGTAA CCCAGGATCT CGAG 504

## (2) INFORMATION FOR SEQ ID NO:1156:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 686 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1156:

GNNNNNNNNN NNNNNNNNNN TTCCCCCTTN TNNCATGTTT TGTTCCTTTN TCCTTGTTTN 60  
 TTTTTTCGGC AAAATATTTC AAGNTATACC CAGGCAACAT NAANTCCAGT TCGGATTTTA 120  
 ATTAGTCGAG TATGCAGCGT CTTTTCATTT TTATTACTCA AAAAAGTTTC ATTTTTTTAT 180

```

TTAGCTTTCT GACTCTGTGC TTGTGCCTTC AACACTTTCA CAACGATTTT CTGCTCCTCG      240
ATAAGGAAAG CACGCTTGAT CCTGTACGA ACACATTTAG CACACATGGA ACCACCATAG      300
GCCCTGCTGA CATGTTTCTT TGTTTTGGAC AATCTCATAA GAACTTTAGG TCTTACAGCA      360
CGAACCCCTC GAAGTCTGCC TGGGCACACA CCACATGCAG ATTTTGGTGC TTTCCCAACC      420
TTCTTGGTAT AAAGGTAAAC AATTCTATTA CCAGGGGTTT GGGACAGCCT AGTTTTGTGA      480
GAGGCTGTAT TGTAGGAAAG CCTACGTCGG TATGTCAAAC GCTGGACCAT TCTGAGTGCC      540
TGCAGACAAC CAAGGGTGAC TATAATGACA GCGTGCAAGT TGTGGACTGT GGACTAAGTC      600
TGAATGATAC TGCTTTTGAG AAAATGATCA TTTCAGAATT AGTGACAAC AACTTACGGG      660
GCAGAGCAA GACTCACAAC CTCGAG                                         686

```

## (2) INFORMATION FOR SEQ ID NO:1157:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1157:

```

GCAATTTGCT TTTTAAAAA TACATTTTCA TACACTAAGT TTTCTGTTAG CCTAAGTAAT      60
TATATTTCTA ATTAACCTCA AAGTAATTGA TAGGTGGCAA AGGATATCAA TCAAAACCAG      120
TCCAAGTAAA AAATGTACAC TAATTTAATA ACAATATTAT TCTATATTAC TTTTTTTTTT      180
TTTTTTTGAC ACAGGAGTTT CACTCTTCTT GCCCAGGCTG GAGTGCAGTG GCACGTCTCG      240
GCTCACTGCA ACCTCCACGC CCCCAGACT CGAG                                         274

```

## (2) INFORMATION FOR SEQ ID NO:1158:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1158:

```

GAAGATGGAC AACCGGGATG TTGCAGGAAA GGCTAACCGG TGGTTTGGGG TTGCTCCCCC      60
TAAATCTGGA AAAATGAACA TGAACATCCT TCACCAGGAA GAGCTCATCG CTCAGAAGAA      120
ACGGGAAATT GAAGCCAAAA TGGAACAGAA AGCCAAGCAG AATCAGGTGG CCAGCCCTCA      180
GTCCCCACAT CTCGAG                                         196

```

## (2) INFORMATION FOR SEQ ID NO:1159:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 141 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1159:

```

GAATTCGGCC TTCATGGCCT AGAGGTGAAA TACAGAAAGC CTTTTTTTCT TGATCTTTTC      60
CCGAGATTCA AATCTCCAAT TCCATTGG GGGCAAGTTT TTTTCTTCAC CTTCAATATG      120

```

AGAATTCAGC GAACCTCGA G

141

## (2) INFORMATION FOR SEQ ID NO:1160:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1160:

GAATTCGGCC TTCATGGCCT AGTAATATAT ATAATTTATA AGTAAATATA AATTAGGGAG	60
GTGTACTCAA CATTTCATA GAATACATAG TCAAAAATGG TTTGCAACCT CTGCCTAACA	120
AAAATAAAAC ACCCTACATC TTTGGTCAA GATTGTCACC CCAACAGTT GTGTGAAATG	180
TGGGGCAGGA ATTATCACTA TTTTCCTTTG GAAATTAAGG TTCCAAAGAT AATGAGACCA	240
GAGCCAAAGG TCAGAGTCCA CTGTCTTCTC TCTGAGGCCT CAATGTGAAG ACCTGAAC TG	300
TGGCAGCAGA TAATTCTGGA GACCTGTAA TCAGCTGTAT GCACCACAAC TCGAG	355

## (2) INFORMATION FOR SEQ ID NO:1161:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1161:

GTATTCATC ATATAATTTT CTCGAATG GGAATTTAGG CAGTATGTTA TGGGATTTTT	60
TTTTAATTT ATTTTTTTT TTTTAGGAA GCTTGTCTTCT CTTTTCATT TATAGAGAGC	120
ATGTTTATAT TAAAGAGTAC CTTCCATACT ATAGAACACA TTTGTGGGTG GATTCGGTCC	180
TTTTCTTCT ACCCTCCCTG ATTGCTGCTA ACAATCCAGA AAGACAGAAA TTTGTTTTTC	240
ATTCAGGCAC ACTCGAG	257

## (2) INFORMATION FOR SEQ ID NO:1162:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1162:

GAATTCGGCC TTCATGGCCT ACTGTTTCCT TGCCCTTTTC ACCGTCTGGT GGTTCCCTGC	60
AGCCCTTGGC TTGTGGCCCT CTCATCCATC TTCCGAGCCT AGCACTCCAG TCTCTGCTTC	120
TGTCATCACA TCGCCTTCTC TTGAGAAAGA TCCCAGGCTG GTATTTAAAT TGCCTGTGTTG	180
CAGGAACTTT GCCTGTCTTC CCCTACCCCC ACAGCTCGAG	220

## (2) INFORMATION FOR SEQ ID NO:1163:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1163:

```
GAATTCGGCC TTCATGGCCT AATCACTTGA GGTCAAGGAGT TCATGACCAG CCTGGCCAAC      60
ATGTTGAAAC CCCATCTCTA CTAAAAATAC AAAAATTAGC TGGGCATGGT GGGGGGCACC      120
TGTAATCCCA GCTGCTAGGG AGGCTGAGAC AGGAGAATCA CTTGAACCTG AAAGGTGGAG      180
GTTGCAGTGA GCGGAGATCG TGCCACTGCA GTCCAGCCTG GGTGACAGGG CAAGACTCCG      240
TCTCCAAAAA AAAATTAAAA ATAGAAATAC ATTTTAAAAA CCAGATACTT GTAGCATATA      300
TAAGGGACAA TTGCAGTTTG GAAGGTACTT CCACATGTAT TATATAATTT TATTTTAA      360
AATGAATCTC ATTTGGTTGT CATGAAATTT GGCAAGCTTC TCGAG                        405
```

(2) INFORMATION FOR SEQ ID NO:1164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1164:

```
GAATTCGGCC TTCATGGCCT AGCAGAAGCG AGAGGAGGAG GAGAAGAAAG CGGAGTTCGA      60
GCGGCAGCGA AAAATTCGAC AGCAAGAAAT AGAAGAAAAA CTCATCGAGG AAGAAACAGC      120
ACGAAGAGTA GAAGAATTGG TAGCAAAAAG GGTGGAGGAA GAACTGGAGA AAAGGAAGGA      180
TGAAATTGAA CGAGAAGTTC TCCGAAGGGT GGAGGAAGCC AAACGCATCA TGGAAAAGCA      240
GTTGCTCGAA GAACTCGAG                        259
```

(2) INFORMATION FOR SEQ ID NO:1165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 114 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1165:

```
GAATTCGGCC TTCATGGCCT AAATTTAGC AATACAGCTC TCACATACAT AAATTATAAA      60
ATAATTTTAT TTAAGGTGAT GAAATTTATA AGCAGGTTCA AAAATATAAT AAAA          114
```

(2) INFORMATION FOR SEQ ID NO:1166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1166:

GAATTCGGCC	TTCATGGCCT	AGTCAGCAAC	ACCCAACACT	GTCTGTTTTC	CATTTGTTGG	60
TTTAAATCAT	AAAATTGTCA	AGTGATTCGT	GTTTGTA	CTT	TTTTTTTG	120
AAGGATCTAA	AACAAAAATA	TTTTGCCTTT	TTTTCCCCAC	GTGTATCTGA	ACATTAAGCA	180
GATTGGCTCA	GACACAATGA	AAAGGATAAT	CCAATGTACG	TGCTGGTGCA	CTCTGCTAGT	240
TGTTATCTCT	GTAGGGCTCA	GGAAGCTGGA	AGGAGGAAGG	GAGGGTAAGT	GGCCTGGTGA	300
GTGGAGGTGG	CTCGAG					316

## (2) INFORMATION FOR SEQ ID NO:1167:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1167:

GAATTCGGCC	TTCATGGCCT	AGGTACCAAT	AATTTCTTCA	CTTCTTCAAC	TGCTCTCTTC	60
AATTTGATTT	CTGCTCTGTT	CTGAGCATCT	TCCACAGTGA	TTAGTACATG	TAAATCTTCA	120
TTTAGATGCT	CCCAATTGGG	CTTGCCTCTA	TTTTGCTCCT	CCTTTTTTTT	ATCCCTCATT	180
GAGCCTTTGC	CTCGGACCAT	GATTTTACAT	CCGGTTTCTG	CTTCAAGTTG	TTTGGCTGTA	240
AGTCCTCTAG	GTCCAAGGAT	TCTCCCAACA	AAATTAAACT	TCGTCCAGCA	GCCGCTCGAG	300

## (2) INFORMATION FOR SEQ ID NO:1168:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1168:

GAATTCGGCC	TTCATGGCCT	ACCTTCACAG	AAAAATGCAT	AGCTGGATGC	TGCAGACTCT	60
AGCGTTTGCT	GTAACATCTC	TCGTCCTTTC	GTGTGCAGAA	ACCATCGATT	ATTATGGGGA	120
AATCTGTGAC	AATGCATGTC	CTTGTGAGGA	AAAGGACGGC	ATTTTAACTG	TGAGCTGTGA	180
AAACCGGGGG	ATCATCAGTC	TCTCTGAAAT	TAGCCCCCCC	GATCTCGAG		229

## (2) INFORMATION FOR SEQ ID NO:1169:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1169:

GAATTCGGCC	TTCATGGCCT	AGTGCTGGGA	GCGCAGCCGG	CGGGCGAGGC	TGCCTGGAAC	60
GTGGAGCTGC	TGGAGCTGTC	CGGCTGACCT	GGAAAGTTCT	TTGGCCTCTA	GGCTTTACCT	120



GGAGGCCTCT TCCTTCAGCT CCTTGTTTT CCGCACCTCC TCGGCGTGCT TGTCTTCTC	180
TTGCAGCCGT TCCAACATGG CGGCGAGGTG GGCTCCCTG TTCTCCTTGT TGGATTCCAT	240
CTTCTGGGCC AGTTTTTCCT TAGCCATCTT GATGAAGTTG TTGTTTTCTT CAATGGCCTT	300
TTGGATCACC TCTCTCTCAT GTTCCCGGAA TTCTAGACCT GCCTCGAG	348

## (2) INFORMATION FOR SEQ ID NO:1170:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 81 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1170:

GGCTTTTTCC AAATTGCTCT GGCTACCATA TAGAAAATTG ACTGAAGGAG GGCCAAGATG	60
GAAACAGAGA GGACGCTCGA G	81

## (2) INFORMATION FOR SEQ ID NO:1171:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 418 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1171:

GAATTCTGAG GGACTAACTA CGACCATGAG ATTGGCAGTG ATTTGCTTTT GCCTATTTGG	60
CATTGCCTCC TCCCTCCCGG TGAAAGTGAC TGATTCTGGC AGCTCAGAGG AGAAGAAGCT	120
TTACAGCCTG CACCCAGATC CTATAGCCAC ATGGCTGGTG CCTGACCCAT CTCAGAAGCA	180
GAATCTCCTT GCGCCACAGA ATGCTGTGTC CTCTGAAGAA AAGGATGACT TTAAGCAAGA	240
AACTCTTCCA AGCAATTCCA ATGAAAGCCA TGACCACATG GACGACGATG ATGACGATGA	300
TGATGACGAT GGAGACCATG CAGAGAACGA GGATTCTGTG GACTCGGATG AATCTGACGA	360
ATCTCACCAT TCCGATGAGT CTGATGAGAC CTTCACTGCT AGTACACAAG CAGTCGAG	418

## (2) INFORMATION FOR SEQ ID NO:1172:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 431 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1172:

GAAAACAGCA CTGCATGTCT TTGGCAAGCC ACAAGTTTCA TAGATACAGC TGTGCTCACT	60
GCAGAAAGCC TTTTCATAAG ATAGAAACAT TGTACCGACA TTGCCAAGAT GAGCATGACA	120
ATGAGATAAA GATTAAATAC TTCTGTGGGC TTTGTGATCT TATCTTTAAT GTGGAAGAAG	180
CATTTTTGAG TCATTATGAG GAGCACCACA GCATAGATTA TGTATTTGTG TCAGAAAAAA	240
CTGAAACTTC AATTAAAACC GAAGATGATT TTCCAGTAAT AGAGACCACT AACCAAGTTAA	300
CTTGTGGTTG CCGTGAGAGT TACATCTGTA AAGTCAACAG AAAAGAAGAT TATAGCAGAT	360
GTCTCCAAAT CATGCTGGAT AAAGGAAAAC TGTGGTTTCG CTGCAGTTTA TGTTCGGCAA	420

CAGCACTCGA G

431

## (2) INFORMATION FOR SEQ ID NO:1173:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 319 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1173:

GAATTCGGCC TTCATGGCCT ACCCCTTAAA GGAAAGAATG GCTGCTCTAG AAGAAAAGAA	60
TGTTTTTAATT CAAGAATCAG AAACCTTCAG AAAGAATCTT GAAGAATCTT TACATGATAA	120
GGAAAGATTA GCAGAAGAAA TTGAAAAGCT GAGATCTGAA CTTGACCAAT TGAAAATGAG	180
AACTGGCTCT TTAAT.GAAC CCACAATACC AAGAACTCAT CTAGACACCT CAGCTGAGTT	240
GCGGTACTCA GTGGGATCCC TAGTGGACAG CCAGTCTGAT TACAGAACAA CTAAAGTAAT	300
AAGAAAACCA AAACCTCGAG	319

## (2) INFORMATION FOR SEQ ID NO:1174:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 171 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1174:

GAATTCGGCC TTCATGGCCT ACTTAATATA TTTGTGAGAT AATTATTGAG ACATTTTATT	60
AATATTTTAT TTAGTCTTAG AATTTCAGAG AAAAGTGAAC CTAGAGAGGT ACTTCTCCTG	120
GTTCAAACCTG TGAACATGAA AATTCTGAAT TTAAGTAACT GGATCCTCGA G	171

## (2) INFORMATION FOR SEQ ID NO:1175:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 366 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1175:

GAATTCGGCC TTCATGGCCT AAGGAAACAA AAAGCTAAGG GCAAAATGTA CAAACTTAGA	60
AGAATTGGAA GATAGAAACA AGATAGAAAA TGAAAATATT GTCAAGAGTT TCAGATAGAA	120
AATGAAAAAC AAGCTAAGAC AAGTATTGGA GAAGTATAGA AGATAGAAAA ATATAAAGCC	180
AAAAATTGGA TAAAATAGCA CTGAAAAAAT GAGGAAATTA TTGGTAACCA ATTTATTTTA	240
AAAGCCCATC AATTTAATTT CTGGTGGTGC AGAAGTTAGA AGGTAAAGCT TGAGAAGATG	300
AGGGTGTTTA CGTAGACCAG AACCAATTTA GAAGAATACT TGAAGCTAGA AGGGGAAGGA	360
CTCGAG	366

## (2) INFORMATION FOR SEQ ID NO:1176:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 222 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1176:

```

GAATTCGGCC TTCAGGCCTA CAAGAATTTT ATGCCATCCA AGAGTATTAG CACAAATAAA      60
TAAAGGCAAT TTGTAAATTT TTCCCTGAA AATCTAAAAA ACAAGAAAAC TATCTCTTCA      120
GGGTGATTAT AATTAGGTCT ATGAGACTCT CAAGGTCCCCT TTAGTGATTG AGAATCTATA      180
GTTGGAAATA CTTATTTTAA AATGTTTCAGG CAGTTGCTCG AG                      222

```

## (2) INFORMATION FOR SEQ ID NO:1177:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1177:

```

GAATTGTCCA CAGCCTGTCA TGCCGCACAA CTGTCCACGC TCGGTTCTCT CGGATATCAC      60
AGTACACTAC AAATGGCTTC AGGGGGCCAC TGCCATCAGG ATCAATGGTG AAGTTTCCAG      120
AAGTTTTCCC ACTGAGCCGA TAAGCCTCAC AGGATTCCCT ATACAAAGGT GTGTGGCAGG      180
TCTCTCCCTT GTAGCCCGTC AGTTCGCAGT AGCAAATGAA GTCATCCCAA GACTGGTAGC      240
AGCGTCCATC ATGCTCACAC ATGTTAGGGC TGCACCTATC AGTGATGCCA CATGTATCAA      300
AGAGGACCTC AGCATAGAAT CCAAGCCGCC GGCCCTCCAC CAGAGTCAGG TTGACCAGTT      360
GACCGAG                                         367

```

## (2) INFORMATION FOR SEQ ID NO:1178:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1178:

```

GAATTTAGAA CGGGTACAAA AGGACCTAAG CCAAACACAG TGTCAAATGA AGGAAATGGA      60
ACAAAAGTAT CAAAATGAAC AAGTTAAAGT GAATAAATAC ATTGGAAAGC AGGAGTCTGT      120
AGAGGAGAGA TTGTCTCAAC TACAAAGTGA GAATATGTTG CTTGACAAC AACTGGATGA      180
TGCCCAACAAC AAGGCTGACA ATAAAGAGAA GACAGTGATT AATATCCAAG ACCAGTTTCA      240
TGCTATGTG CAAAACTTC AAGCTGAGAG TGAAAAGCAA AGTCTTCTGC TAGAAGAAAG      300
AAATAAGGAG TTAATCAGTG AATGTAATCA CTTAAAAGAA AGACAGTATC AATATGAAAA      360
TCTCGAG                                         367

```

## (2) INFORMATION FOR SEQ ID NO:1179:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs

(B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1179:

```
GAAACCGAAA GTGGAAATGT ACTCTGGGAG TGATGATGAT GATGATTTTA ACAAACCTTC      60
TAAAAAAGCT AAAGGGGAAAG CTCAAAAATC AAATAAGAAG TGGGATGGGT CAGAGGAGGA      120
TGAGGATAAC AGTAAAAAAA TTAAAGAGCG TTCAAGAATA AATTCTTCTG GTGAAAGTGG      180
TGATGAATCA GATGAATTTT TGCAATCTAG AAAAGGACAG AAAAAAATC AGAAAAACAA      240
GCTCGAG                                           247
```

(2) INFORMATION FOR SEQ ID NO:1180:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 149 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1180:

```
GAATTCGGCC TTCATGGCCT ACGAGTTCTT CATGCTTGTT GTTGAGATTT GAGATGTTTA      60
TTGGTAACAT TGTCTTTTTT CCATCCTTTT TTTTCTTTCC TAACCTGGTT TCTTCCAGTG      120
CAACTGCAGA TAGAAGACCT GACCTCGAG                                           149
```

(2) INFORMATION FOR SEQ ID NO:1181:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 251 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1181:

```
GAATTCGGCC TTCATGGCCT AGAAAATTAA ACTGTTTTTT AAACCAGGTG TTCACITTTTC      60
ATTGATTTTT GCATAGTACT TGGTGAACCC TATTGATTTT TAGATTCAGG TAATTTTTCA      120
GTGTGAAAGA GTTTTTCTGT TATATCTTCA CTGTGATATC CATTCCATTC CTTTCTCAGT      180
TAATACTCAG TTTAGCTCTA GTATCTGTCT CTCAAATTAT GTTTAATTGC TTTTATCACT      240
TTGTCCTCGA G                                           251
```

(2) INFORMATION FOR SEQ ID NO:1182:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 176 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1182:

```

GAATTCTAGA CCTGCCTAGA GTGCTCTGTG TATGCGGATG ATTTAGAATT GTCATTCTC      60
TTTACTGGAT GTTTATTTAT AAAGATCTGG CCTGTTCCCTG CGTCTGCGGA GCGGCCCTTG      120
TCTCCCAGCT ATCTATAACC TTAGCTAGAG TGTCGCCTTG TGGGTTCCCT CTCGAG          176

```

## (2) INFORMATION FOR SEQ ID NO:1183:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1183:

```

GAATTTAGAA TTCTTGACGG GTTCTCGGGG GTTCCTGTTG TATAAAGGCC TTCATTACTT      60
TAGTTATACC CAAGTGAAAG GGGCATTTAC CTCGTGACAA GTGGATTATA GGAGAAAAAG      120
AGGAGATGGT AGGTCAGAGT GTGCTTAGAA GTCATGCCCA GTGTTCTCAT CAATGCCAGA      180
CATTACGGGC TGCCCTTCCA TCAGCCATTC TACCTTTCTT CCTGCTAACA ATATCCCAAT      240
TTTGTTCAGG TATCAGGCCA CTTAATATGT TTCAGGGAAA ACTGGTTCCA GCCCAGAGCA      300
GTGTGGACCT TGATTACATC AACTAATCA TGGTGAGTCC ATTTTCCTTG CCAGAAATTC      360
GTTTAGGAGT GGACATGTAT TCACTTGTTG AGTACACAAG ACGACTCGAG          410

```

## (2) INFORMATION FOR SEQ ID NO:1184:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1184:

```

GGAAACAGAC AGTACCAAGG AAGAAGCAGC TAAGATGGAA AAGGAATATG GAAGCTTGAA      60
GGATTCCACA AAAGATGATA ACTCCAACCC AGGAGGAAAG ACAGATGAAC CCAAAGGAAA      120
AACAGAAGCC TATTTGGAAG CCATCAGAAA AAATATTGAA TGGTTGAAGA AACATGACAA      180
AAAGGGAAAT AAAGAAGATT ATGACCTTTC AAAGATGAGA GACTTCATCA ATAAACAAGC      240
TGATGCTTAT GTGGAGAAAG GCATCCTTGA CAAGGAAGGG CTCGAG          286

```

## (2) INFORMATION FOR SEQ ID NO:1185:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 417 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1185:

```

GCGATTGAAT TCTAGACCTG CCTCACCTTA CCCCAGGACT CCGCTATGAC ACCGCCTCTG      60
CCCCTACAAG ACACAGATCT CTCGTCAGCC CCAAAGCCTG TGGCTGCAGC CACGATTGTG      120
TCCCAGCAGG CTGAAGAGGG CCTCACCTTA CCCCAGGACT CCGCTATGAC ACCGCCTCTG      180
CCCCTACAAG ACACAGATCT CTCGTCAGCC CCAAAGCCTG TGGCTGCAGC CACGCCTGTG      240

```

```

TCCCAGCAGG CTGAAGAGGG CCTCACCTTA CCCCAGGACT CCGCTATGAC ACCGCCTCTG      300
CCCCTACAAG ACACAGATCT CTCGTCAGCC CCAAAGCCTG TGGCTGCAGC CACGCTTGTG      360
TCCCAGCAGG CTGAAGAGGG CCTCACCTTA CCCCAGGACT CCGCTATGAC ACTCGAG        417

```

## (2) INFORMATION FOR SEQ ID NO:1186:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 260 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1186:

```

GGAAGGGGCT TTTACAACTT CCTTTTGTTC CCAGGCGTTA GTATCTCTGC TTGGTATAAG      60
ATACCAAGTAT TCCTAGGAAA GGCCTTGAAA AGAGGGACAG ATACAAGCCT CTTCTGAAAA      120
ATCTATGCTT TTCTTACCTC TACCAAGTAA TAGCAAACAT GAAAATGGTA AAGATCTTTA      180
CAACATTTGT CTCTGTACAT ATAAAACGTT TAAACACATG CGCAAAGATG GAGCAAAATA      240
TCATAGAAAA TAATCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1187:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 337 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1187:

```

GAATTCGGCC TTCATGGCCT ACAAGGAAAT GCCCAAGGAA AAACGTGAGC TTCAGTTTCG      60
GCGAAAGGTC TTAGCAGTCA CAGACTCACC TGCCAGGAAG GGCAAGGACT CTCCTCTAA      120
GCAGAGCCCT GGGGAGTCCA CGAAGAAGCA GGATGGCCTA GTCCAGATTG CACCAAACCT      180
GACTGTGATC CAGTTCATTA AAGTCTTCCC CAGGGTGCTG CTGCAGACCC TACGCCACCC      240
CATCTTCCTG CTGGTGGTCC TGTCCAGGT ATGCTTGTCA TCCATGGCTG CGGGCATGGC      300
CACCTTCCTG CCCAAGTTCC TGGAGCGCCA GCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1188:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 537 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1188:

```

GAATTGGCCT TCATGGCCTA CGAGGCGTCA CTGATCTTAA CGAGACTTCC AAATCGTCTC      60
AGCAGGGGCT CCAGACTTCC CCAGCAGGCG GCAGGTTTCC TGTCATGCTT TCGCCTTCCT      120
TCTCATATAC ACCAGTGCTA GAGTTCATCA TGTGTCAAAA TTGTATCTTG CTTCTTGTTT      180
TCAAGATGAT CTAATAGTTG TCTTATCTCA GCATCATACT CCACCCATTG TGGGACAAAT      240
CTGGCAGCAG CTTTGTAGTTT GGATTCTTTT GTTTTGGGAT TATTGCACAG ATCAATTGTT      300
TTGGCCCTCC TTGGACTAAC CACATACAAA TATGAATCTG GCTGCAAGAA CAGGATATCC      360

```

AGGTAAGTAG AGAGTGGGCA TTGATAAAAA TATCTGGTGG AGAAGCCTAG GATTTCAACT	420
TTTGTGTCAGA GGATTCCCTGT TGGGACAGCT TTACCAGAAA AGAATAATAG CGGATATGTT	480
CATCCAAACT AAGAACTTTC ATGCATCTTG CATTGTTACA TAGCCTGTGG ACTCGAG	537

## (2) INFORMATION FOR SEQ ID NO:1189:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 65 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1189:

GAATTCGGCC TTCGTGGCCT AATTGAATTC TAGACCTGCC TCGAGGATTC AATTAGGCCA	60
TCGAG	65

## (2) INFORMATION FOR SEQ ID NO:1190:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1190:

GAATTCGGCT TCATGGCCTA ACTTTATGTC ATAAACTGA TTAAATAAT CTTGAAATGG	60
CCATTAAGGA AGATCAGATT GCAGATAACT TTCAAGGAAT ATCAGGTCCT AAAGAAGACA	120
GCACAAGTAT AAAAGGTAAT TCAGACCAGG ATTCTTTTCT TCATGAGAAT TCGTTACACC	180
AAGAAGAGAG TCAAAAAGAA AATATGCCTT GTGGGGAAAC AGCAGAATTT AAACAAAAGC	240
AAAGTGTTAA CAAAGGAAAA CAAGGAAAGG AGCAAAATCA GGAATCAGAG ACAGAGGCAG	300
AAGAGCTACG CAACTTTGG AAAACCCATA CTATGCAACA AACTAAACAG CAAAGGGAAA	360
ATATTCAACA AGTGTCACAA AAAGAAGCTA AACTCGAG	398

## (2) INFORMATION FOR SEQ ID NO:1191:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1191:

GAATTCGGCC TTCATGGCCT AGCCATTGTT TATACATTAT TGCTGTCAGT ATTCACCAAG	60
ATGGTGCTAT TACCTGTTGT GGGGCAATTT TCCTTGTCAT TTCTACATAT CTTGGAACAG	120
CTTTTGTCCT TATATTTTCA AGAATGTTCT AAAGCAGACA GCCTTGAGG AGAGACAGAT	180
AGTGAATCCC TCCAGGGAAA AAGTCGGATT TGTGTGCTCC CCTGCCTCGA G	231

## (2) INFORMATION FOR SEQ ID NO:1192:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 262 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1192:

GAATTCGGCC	TTCATGGCCT	ACACTAACCG	CAGCATGGCG	GATCTGAAGC	ACAGCAGCTT	60
GCGGTACGAG	CTCCGAGCAG	ATCTGGAGGA	AGAAAGAATG	CGGCAGAAAA	TAGCAGAAAG	120
GACCTCAGAA	GAAACAATAC	GCATTTACTC	TTTGAGACTG	TTTTTGAAGT	GTATTGTTCT	180
GGCTGTTTTA	GGGGCATGCT	TTTATGCAAT	ATACGTAGCA	ACTGTCTTCT	CGCAAGAGCA	240
CATGAAAAAG	GAAATCCTCG	AG				262

(2) INFORMATION FOR SEQ ID NO:1193:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 381 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1193:

GAATTCGGCC	TTCATGGCCT	AGAGGAAATT	GCTAATGTAA	CAGAGACATC	AGATCCAGAA	60
TTCCAACGAA	CCTGAATGAG	CCCTGGTGTG	GAACAGCCGT	GAGCCTGTCC	ACGTTTTTCT	120
CCTGATCTCT	GCTTTTCATT	AGTAATGAAT	TTCCACTCCT	TCTCCCCTTT	CATGACAAAT	180
CAGTACAGTG	AATGTAATTG	CCACATCCAG	CGATGCATCA	TCTTCCCACT	TTTCTAGGCT	240
GCAGAGAAGG	AAGCAGCCCT	TGTGCAGCAA	GAAGAAGAAA	AGGCTGAACA	ACGGAAAAGA	300
GCTCGGGCTG	AGAAGAAAGC	GTTAAAAAAG	AAGAAAAAGA	TCAGAGGCCC	AGAGAAGCGC	360
GGAGCAGATG	ATGGACTCGA	G				381

(2) INFORMATION FOR SEQ ID NO:1194:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 294 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1194:

GCGATTGAAT	TCTAGACCTG	CCTCTCTTAC	CCTTGGCTTA	CTAATATATT	CTTAGTGCCA	60
TTTCATTTGG	TGGTACTGGT	GGCGCATTC	AACAGGACAC	TTGTATCTGA	GTGAGCAGCT	120
GGAGCAGTAA	GAATGACAAC	ACTTGGTCTC	TGCAGATTGG	CTGGACCCAC	CACTCTGGTG	180
CTAGTGCTGG	CTTGGTGGCT	GAGGGAACAA	GCAGGAAGTA	GAAGAGGAAA	TGAGATGTGG	240
GTGGAGTGGG	AAGAGAGGAC	AGATTGGGGA	GGGAGGGGAA	AGTGCAAAC	CGAG	294

(2) INFORMATION FOR SEQ ID NO:1195:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 262 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double



(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1195:

```
GCGATTGAAG TCATTGCCAC GCCTACTAGT TTGCACTAAA GGAAAGTCAG TTTGGTATGA      60
ATTACAATGG CCAACGTTAC ATTCTCCTCC GTTTGTGTTT TTTTCTTTAA TCTCAATTTT      120
TCTTACTTTT CTTATTCCCC CTATGCTGAT GCCAATCAGT TTCTTTTGGG AAAGTTTAA      180
CAGATCGGTT TTATGTTTTG AAGTACAGCA AGTATTTTCT CCTCTCTTTA AAATACAAAA      240
CCCAGAAACC CAGGAGCTCG AG                                         262
```

(2) INFORMATION FOR SEQ ID NO:1196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1196:

```
GAATTCGGCT TCATGGCCTA GACCGTCTCA AAGAAAACAC ATATACCTTT TGCTCAGATT      60
ATTGTTAAAT TTTACCTCAT TTACTTTATC AATTGCTCTT TCTCTATTTA TGTGTATCAG      120
ATTATGTGTA AATGTTACCT TATTTGCCTT ATCAATTGCT CTCTTTATGT ATGTTTGTGT      180
GTACTGTTGC ACATGCAAAT GCACACAAAT ATATGTTTCT GAATTTTTTG AGAGTAGATT      240
GCATACATTA TGGGACCTGC CTCGAG                                         266
```

(2) INFORMATION FOR SEQ ID NO:1197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1197:

```
GAATTCGGCC TTCATGGCCT AAGAAACACT TTTAAAAATC TTTCCTAGT TATTTGTAC      60
ATAGATAAGA TAGTTGATTC CCAGCTTTTA TCTGTAAAGT TGTCTAATT GGAATTAACT      120
TCGGTGATTC TGTTGTATAA AACATTGTTA TATTTTATAGG TGTGTGCGGA TTTTAGGCAA      180
ACAAGAAAAT ATTAGAGTGA TGCAATTGGC TTTGTTCCAG GGGATGCTCG AG          232
```

(2) INFORMATION FOR SEQ ID NO:1198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1198:

```

GACCTTTACC ACTAAGTGGA GCCAACTTTA GCACCTTGCT AATGAATCTG GGTCCTGAGA      60
ATTGTGCAAC ACTGCTGCTC TTTGTTTTAC TTGAGAGTAA AATTCTGCTG CATTCTCTTA      120
GGCCAGCTGT CTTGACTGGG GTAGCTGAAG CTGTTGTAGC TATGATCTTT CCATTTTCAGT      180
GGCAATGCCC ATATATTCCC CTTTGTCTCT TTTCACTGGC TGCAGTGCTT AGTGACACCTT      240
TACCATTTAT AGTTGGAGTT GACTCAAGGT ATTTTGATCT TCATGACCCA CCAAGGCTCG      300
AG                                                                                   302

```

## (2) INFORMATION FOR SEQ ID NO:1199:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1199:

```

GCCACTGCTC CTGGCCAGGA CTCTCTTATT AGGTTTGACA TTTCAAGAGT TTAGAAATTA      60
CCTTCCAGAA TTCACAGGTA AAAGCCAGAC CTCTCCTTGG TGAAGATACA ATTCTTTACA      120
ATTTTACAAT AGTTAAGTAT ATTTTATCAG TCTATATTGG CTGTTTAGTT GACAAACCGT      180
TAAAAATTGG TGACAGTCCA GATGTGGTCA CTCATGCCTC TAATCCTCGA G                231

```

## (2) INFORMATION FOR SEQ ID NO:1200:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1200:

```

GAATTCTAGG CCTGACCCAG CCCCCATGGC TTCAGAAGAG CTACAGAAAG ATCTAGAAGA      60
GGTAAAGGTG TTGCTGGAAA AGGCTACTAG GAAAAGAGTA CGTGATGCCC TTACAGCTGA      120
AAAATCCAAG ATTGAGACAG AAATCAAGAA CAAGATGCAA CAGAAATCAC AGAAGAAAGC      180
AGAACTTCTT GATAATGAAA AACCAGCTGC TGTGGTTGCT CCCATCACTC TCGAG          235

```

## (2) INFORMATION FOR SEQ ID NO:1201:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1201:

```

GAATGAGAGG TCAGAGTATT CCATTGCACA CGCACCCTGG GGCTGACAGA CTTGTGCCCC      60
CTAGCCTTCA TGCATGCCCA AGCACTGGCA GCTTTGCAGC CCCTGCCCCA CGACTCGAG      119

```

## (2) INFORMATION FOR SEQ ID NO:1202:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1202:

```
GATTGAATTC TAGACCTGCC TCGAGATTCT TTGAGCACTT TCCCCATCC CCAGGGCCAC      60
AGATCCCCTT CCTTACTTGT TGGGGGGAGG TCTGGAGCAC CTCGCCAATG CCCTTCCCCC      120
ATCCGGCTGG GTCCTTCCAG TTATTTATTT GTGTATTTAT TTATTTATCT ATTTATTATT      180
CTATTTAATC TCTTGGCCTC ACCCAGGGAC CGTCTGGCTT CCCAGCTGG ACTGGGAGGT      240
CAGGAAGCCA GGCAAGGAGA GGGACAGCAC AGGCCACAGA GGGCTGCCCC CACCACACAC      300
ACCCCGCGT CTCGGGAGAA ACCCACCTC TTCAGAGCCT GCACTCGCTA AGGAAGGGGA      360
CTCGAG                                     366
```

(2) INFORMATION FOR SEQ ID NO:1203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1203:

```
GGTGAGATGG AAAAGGAGTT TCCTGAGCTT ATCCGAAGTG TTGGTTTACT TACGGTAGCT      60
GCTGACTCTA TCTCTACAA TGGCAGTGAA GCAGTTACTG AGGAGGTATC TCAAGTATCT      120
CTCTCAGTAG ACGACAAAGG TGGATGTGAG GAAGACAATG CTTCTGCAGT CGAAGAGCAA      180
CCAGGCTTAA CACTGGGGGT GTCATCATCT TCAGGAGAAG CTCTGACAAA TGCTGTTCAA      240
CCCTCCTCTG AGACTGTGCA GCAAGAATCC AGTTCCTCCT CCCATCATGA TGCAAAGAAT      300
CAGCAGCCTG TTCCTTGTA AAATGCAACC CCCAACTCG AG                                     342
```

(2) INFORMATION FOR SEQ ID NO:1204:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 645 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1204:

```
GAATTCGGCT TCATGGCCTA CGTCTTTCTA ACTATCTATG GGGTGGAGCT GTTCTGAAG      60
GTTGCCCGCC TGGGCCCTGT GGAGTACTTG TCTTCCGGAT GGAAGTTGTT TGACTTCTCC      120
GTGACAGTGT TCGCCTTCCT GGGACTGCTG GCGCTGGCCC TCAACATGGA GCCCTTCTAT      180
TTCATCGTGG TCCTGCGCCC CCTCCAGCTG CTGAGTTGT TTAAGTTGAA GGAGCGCTAC      240
CGCAACGTGC TGGACACCAT GTTCGAGCTG CTGCCCCGGA TGGCCAGCCT GGGCCTCACC      300
CTGCTCATCT TTTACTACTC CTTGCCCATC GTGGGCATGG AGTTCTTCTG CGGGATCGTC      360
TTCCCCAACT GCTGCAACAC GAGTACAGTG GCAGATGCCT ACCGCTGGCG CAACCACACC      420
GTGGGCAACA GGACCGTGGT GGAGGAAGGC TACTATTATC TCAATAATTT TGACAACATC      480
CTCAACAGCT TTGTGACCCT GTTTGAGCTC ACAGTTGTCA ACAACTGGTA CATCATCATG      540
GAAGGCGTCA CCTCTCAGAC CTCCCCTG AGCCGCTCT ACTTCATGAC CTTTACATT      600
GTGACCATGG TGGTGATGAC GATCATTGTC GCCTTTATCC TCGAG                                     645
```

## (2) INFORMATION FOR SEQ ID NO:1205:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1205:

```

GAATTCGGCC TTCATGGCCT ACAGTACACA AGTGCTAGCC CTAGCAGCTC GCGATGTGCT      60
TCAGCAGAGC AGACGCTGCG GATAACTACC CTTTGGAAAC ATGTCAACAG AGGAAACTTT      120
TTCCTCACTT CCATCCCCCG AATTGATTG GGAACAAGTT TGTCCCTCTT AGGGGATCAC      180
CCACAGAGG GCCTGGGTGT TATTTTCAG ATGGATATGG CTTGGCATA GACTTATCTA      240
AGATCCCAAC CAGTATAAAA GGATATACTT TGGGAGCCAG AACAGCTGTG AGGTTTAAGC      300
CAATACAGAA GGAAATGACA CCTCATGCAG GCAGGT                                336

```

## (2) INFORMATION FOR SEQ ID NO:1206:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1206:

```

GGAAAATCTG AACAAACAAC CGAATAAGCA GTGGAAGAAA TCACAAACAT CTACAAATCC      60
AAAAGCTGCT CTCAAGTCTA AGATAGTTGC TGAATTTTCGA TCTCAGGCC TAATTGAAGA      120
GCTGTTGCTA TACAAGCGCT CAGAAGATCA GATAGAACTG AAGGAAAAGC AGTTGTCAAC      180
TATGAGGGTG GATGTGTGCA GCACAGAAAC TCTCAAATGC TTAAAAGATA AAACAGGTGG      240
GAAGAAGTTC TCCAAGAAT TTGAAGAGGC AAGCTCCAAG CTGGAAGAAT TTGTGAATGG      300
ATCACTCGA                                309

```

## (2) INFORMATION FOR SEQ ID NO:1207:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1207:

```

GAATTCGGCC TTCATGGCCT ACAGCTTTTG AGCGGAAACC TGAAAGAAGG TTTGCAGTAT      60
CTTCAGAGTC TGAATTTTGA GCGGATAGTG ATGAGCCAGC TAAATCCCCT GAAGATTTGC      120
CTGCCCTCAG TGTTAACTT TTTTGCTGCA ATCACAAATA AGTACCAGCT CGTCTTCTGC      180
TACACCATCA TTGAGAGGAA CAATCGCCAG ATGCTGCCAG TCATTAGGAG TACCGCTGGA      240
GGAGACTCAG TGCAGATCTG CACAAACCCG CTGGACACCT TCTTCCCCTT TGATCCCTGT      300
GTGCTGAAGA GGTAGGTACT TTAAACGTT GACATCTCGA G                                341

```

## (2) INFORMATION FOR SEQ ID NO:1208:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 588 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1208:

GAATTCGGCC	TTCATGGCCT	ANCGAGCGGC	AGGTGTGCAC	AGAGGTNCTC	CACTTTGTNT	60
TCTGAACTCG	CGGTCAGGAT	GGTTTCTCT	GTCAGGCAGT	GTGGCCATGT	TGGCAGAACT	120
GAAGAAGTTT	TACTGACGTT	CAAGATATTC	CTTGTCATCA	TTTGCTTTCA	TGTCNTNCTG	180
GTAACATCCC	TGGAAGAAGA	TACTGATAAT	TCCAGTTTGT	CACCACCACC	TGCTAAATTA	240
TCTGTTGTCA	GTTTTGCCCC	CTCCTCCAAT	GGTACTCCAG	AGGTTGAAAC	AACAAGCCTC	300
AATGATGTTA	CTTTAAGCTT	ACTCCCTTCA	AACGAAACAG	AAAAAACTAA	AATCACTATA	360
GTAAAAACCT	TCAATGCATC	AGGCGTCAAA	CCCCAGAGAA	ATATCTGCAA	TTTGTCATCT	420
ATTTGCAATG	ACTCAGCATT	TTTTAGAGGT	GAGATCATGT	TTCAATATGA	TAAAGAAAGC	480
ACTGTTCCCC	AGAATCAACA	TATAACGAAT	GGCACCTTAA	CTGGAGTCCT	GTCTCTAAGT	540
GAATTAAAC	GCTCAGAGCT	CAACAAAACC	CTGCAAACCC	TACTCGAG		588

## (2) INFORMATION FOR SEQ ID NO:1209:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1209:

GAATTCGGCC	TTCATGGCCT	ACAAGGATAG	AATTCATTCC	ACCTATATGT	ACTTAGCAGG	60
GAGTATTGGT	TTAACAGCTT	TGTCTGCCAT	AGCAATCAGC	AGAACGCCTG	TTCTCATGAA	120
CTTCATGATG	AGAGGCTCTT	GGGTGACAAT	TGGTGTGACC	TTTGCAGCCA	TGGTTGGAGC	180
TGGAATGCTG	GTACGATCAA	TACCATATGA	CCAGAGCCCA	GGCCCAAAGC	ATCTTGCTTG	240
GTTGCTACAT	TCTGGTGTGA	TGGGTGCAGT	GGTGGCTCCT	CTGACAATAT	TAGGGGGTCC	300
TCTTCTCATC	AGAGCTGCAT	GGTACACAGC	TGGCATTGTG	GGAGGCCTCT	CCACTGTGGC	360
CATGTGTGCG	CCCAGTGAAA	AGTTTCTGAA	CATGGGTGCA	CCCCAGGGAG	TGCTCGAG	418

## (2) INFORMATION FOR SEQ ID NO:1210:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1210:

GAATTCGGCC	TTCATGGCCT	AGGTTGCAAC	TGCCACGCAG	CAACTGCCAC	GCAGAAAAAG	60
GAGGGGTTGA	AAAGGGAGTA	GCTTCTGATA	TTCAGAAGCT	ATTGGAAGAG	ATGCTCAAAG	120
AAGAAAAAAT	TACCATAATC	CAATAAAGAA	GAAGACCTGA	GATCCAGGAA	GCAGATGATC	180
TGAACTGCAG	AGAAAGTTCA	GGAAAGTTCC	CTCATTCATG	ATGATGGGAA	ATAACAGTAA	240
ATTCTGTACA	GCAGTCTTGG	ACAACAACCA	ATCTAAACTG	GCACAGTGCA	GAGGCAATCA	300
ACAGAGAACA	TAATATTGAT	AGAATGCCTG	ACGCTTTTGA	TTGTATTCAC	AGGAAACATA	360

AACAAATTGGA AAACCTCGAG

379

## (2) INFORMATION FOR SEQ ID NO:1211:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1211:

```
GAATTCGGCC TTCATGGCCT AGAAACAGGG TATTATTTAT CCTCTTAGCA TATGTTTTGT      60
AATGATTCTG TTACATCAGA GCTTCTGTTG ATGAGTGCCA CTAAAGTGAG ATTGTTGATG      120
AGGATTGGCC TTATTTTTTT GTGGTTCTAT TCAATACTTG CCACAGCATT TATTTTCTAA      180
AACATTTCTA CGGTCTATAC TTATCAGTGT CTGATCACAT GCAGGCACTG GTCAAGGTGG      240
AGCATGGTCG AGGCGTTCTT ACTGATACAA ACTCGTGCC TCTCTTGAC ACAAGGAGCC      300
CATGTTCTGG TTAACCTCTG GTTCATTTAT TTCATTGTG ATGCATCGCC TCTATCTTCT      360
CCCTTTATTG CGTCCTCGAG
```

## (2) INFORMATION FOR SEQ ID NO:1212:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1212:

```
GAATTCGGCC TTCATGGCCT AGTGAAGGGT ATTGGTGGTG TTTTTTCCCC TTTACCTCTC      60
ATTTGGGCAT TTTAAATAG GAGGCCAACT TCATTACTC CTGTTTAGTA AATCTAAATG      120
AGTGTAGGTT TTAAATTAGA TTTTTTCCCA AAACCCTTCA GAAGGTCTAG TATTAGGGCA      180
GTTGATAAGT AAGTGAAGC ACCTTGGGCA GGACCCAGTG ACCTGTCCTT TTAATTATTA      240
CAGCACCTGC ACGGGAAGCA GATCTGGAGG ATGAAATTTA ACCTGTTACA GTGTGTGTAT      300
GTTTTAGGGT GTGTGTTTTT CGAATACTGT GGGGAGTTCC CTTTTTCCTT CTCCCATGAT      360
GGATTCTTTT GTCTTTCTAG AGATACCATA GGAGGATATC TGGATTTTTC ACCTAAGGCA      420
GTGTCTCGAG
```

## (2) INFORMATION FOR SEQ ID NO:1213:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1213:

```
CTCGAGTCTC TCCTGTTAAT CTCCTATTTA TAAAAGGATC ATGAGGCTGC CAAGTGCTAA      60
AAATGGAGAT GGTCTAGTAA CTAGAAAACCT CCCCACCCCA GGGAGCACAC CTACGTATGT      120
CCCTACAACC TAATAATGTG ATGTGTTTTG GAACACAGAC ATTAGAAGTT CATGAAGTTT      180
TAACTGTTGA TTCTTTCCCA AGCATCATCA AGTTATGATT TAGGCAATGT ATGATTGAAA      240
```

TGCATTTCATT CATCACGCAT AGGCACAATC ACAGAAATAT TGCACAAAAT ATGTCCCTGA	300
CTGAAACTGA GAGGTACAAA AACGTATTTT ACTCTTCGTA AAGAAGTTTG TGAGGAAATA	360
CAACTCTGCG ATCGTATAGA CATGTTTCCT GATAATACAC TGACATTAC AAACAGTAGG	420
CCATGAAGGC CGAATTC	437

## (2) INFORMATION FOR SEQ ID NO:1214:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1214:

GAATTCGGCC TTCATGGCCT AAAAAGAAAT GATGTTTTCT CTCCAACAGT GTGTTTTTAT	60
TTCTTTCATC TACCTGTCCA GTAATCATTT TAAAAAGAA AATAGCATTG GTTACTGCCT	120
GTGTGATGTG GCCCCGGCTT ATCTGCACTC TCCCTCCTGT TTAAGTTTCC AGCCACCTCA	180
GCTTTTCTC TGTTCCTCTA GCATGGCAAG CTTATTCCTG CCTCATGACT CTTTCGCATG	240
GTGTTTTTCAG ATTTTCTCTG TAGCACTCTG CACGCATTGT CCACCTAAAC TCGAG	295

## (2) INFORMATION FOR SEQ ID NO:1215:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1215:

GACCTGCCGC GAGTGTGTGT GATAGCTTGC TCAAGATCAC ACAGCTAGTA GGTAGTGAGG	60
CTAGGATTTA GACTTAAGTA GTTGGTTGTA GAGTCCACGT GTTTAACCAT TACACTACTT	120
TGATAACAAT ATCATTATTA TTATTATCTT TTTTTTTTTT TTGATACAAA GTCTCACTTT	180
GTTGCCCAGG CTGGAGTGCA GTGGCATAAT CATGGCTCAC TGCAGCCTCG AACTCCTGGG	240
CTCAAGGGAT CCCCCCACTC TCGAG	265

## (2) INFORMATION FOR SEQ ID NO:1216:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1216:

GAATTCGGCC TTCATGGCCT AAAAGAAGGA GCGCGAGAGA AAAAAGCGAG ATGAAGAAAA	60
AGCGAAACTG CGGAAGCTGA AAGAAAAAGA AGAGTTAGAA ACAGGTAAAA AGGATCAGAG	120
TAAACAAAAG GAATCTCAA GGAATTTGA AGAAGAACT GTAAATCCA AAGTGACTGT	180
TGATACTGGA GTAATTCCTG CCTCTGAAGA GAAAGCAGAG ACTCCCACAG CTGCAGAAGA	240
TGACAATGAA GGAGACAAA AGAAGAAAGA TAAGAAGAAA AAGAAAGGAG AAAAGGAAGA	300
AAAAGAGAAA GAGAAGAAA AAGGACCTAG CAATGCCACT CGAG	344

## (2) INFORMATION FOR SEQ ID NO:1217:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1217:

```

GAATTCGGCC TTCATGGCCT AGCCATTATT AAGACCTGTG AAAAAACTA TAGACATGAT      60
GCAGTGAAGA TTCTGAAACT CAAGCCTGTG CTGCAGAGAA GTCTCACTCA CCCTCCTACC      120
ATAGCCCCAG AGGGGTCCAG ACCCCAGGGT GGTTTGCCCA GCAGCAAGCT AGACAGTGGA      180
TTTGCCAAGA CATCTGTTGC TGCTTCTCTA TACCACACAC CCTCTGACTC CAAGGAAATT      240
ACTCTTACTG TTACTTCAAA GGACCCTGAA AGACCTCCTG TTCATGACCA ACTTCAGGAC      300
CCACGACTGC TGAAGAGGAT GGCATTGAG GTCAAAGGAG GAATATTCCT TTGGGATCCA      360
CAACCCCTGA G

```

## (2) INFORMATION FOR SEQ ID NO:1218:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1218:

```

GAATTCTAGA CTCCCGCGCG TACTCGGCCG CCTGAGCGAT ACTAAAATGT CTGATGATGC      60
TGGTGACACC TTAGCCACTG GAGACAAAGC AGAAGTTACT GAGATGCCTA ATAGTGATTC      120
TTTACCTGAG GATGCAGAAG TGCATTGTGA TTCAGCTGCA GTTTCACATG AGCCAACACC      180
AGCTGACCCC AGAGGGGAGG GGCATGAAAA TGCAGCTGTG CAGGGTGAGG GGGCTGCCGC      240
CATTGGGCCC CCTGTGCAGC CTCAGGATGC CAACGCCCTG GAGCCCCCTC TCAATGGAGA      300
CGTGACTGAG GATACACTTG CTGAATGTAT TGATTCCTGG AGCCTCGAG      349

```

## (2) INFORMATION FOR SEQ ID NO:1219:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1219:

```

GAATTCTAGA CCTGCCTCTC CTGTCACTTC CTTGTGTTTT CTCTGTGACC GGCCTCTGTT      60
CCCACCACCC TTTTGGAAGT GCTGTCCTGA TGGTACCAG TGCTTTCCTA ATAGCCAAAT      120
TCAGTGGCCT GTCCTCAAGC TCCCCCGAAT TCTTTGGCCA CACAGATCAA CCTCTAAGTC      180
CTGGGAAGTC CCTCCTTTGT GATTTTGAGG CGCTGTGTGC TGCAGGCTCT GCTTTTCCTT      240
CCCATCACCC CATGGTTCTT CCTTCTCTC TGACCCCTCC CTCTTCCATT TCTCCACAG      300
CTCTGTCCAC AGCCACAATG TCCATAGGAG CCTGCCACAC CCTTTATCCA ACTGCAGCCT      360
CAACCCACCT GCAAAGGACC CCTGAACGAG AG

```



## (2) INFORMATION FOR SEQ ID NO:1220:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1220:

```

GCAAGCTACT TCTTCAACAG CTGTATCTGC TTCAAAGCCG ACTGCCTCTC CTTCAAGCAT      60
TGCAGCAAAC AATTGTACTG TGAATACGTC ATCAATTGCA ACGTCTTCAA TGAAGGGTCT      120
TACGACTACA GGAAACTCGT CTCTTAATAG CACATCTAAC ACTAAAGTAT CAGCAGTGCC      180
TACAAATATG GCTGCCAAGA AAAACATCTA CCCCCAAAAT AAATTTTGTT GGTGGTAATA      240
AGCTGCAGTC NACAGGAAAT AAAGCAGGAG ACCTTAAAG GGACCCGAAT GTGTTAAAAG      300
TAATCCTGTC ATTTCTGCTG TGCAGATTCC TGAAGTAAAG CAAGACACAG TGTCAGAACC      360
AGTCACACCT GCATCTCTTG CTGCTTTACA GAGTGATGTG CAGCCAGTGG GCCATGATTA      420
TGTGGAAGAG GTACGAAATG ATGAAGGAAA AGTAATTCGG TTCCATTGTA AATTATGCGA      480
GTGCAGCTTT AATGATCCCA ATGCTAAGGA GATGCACTTA AAAGGGCGAA GACACAGACT      540
TCAATATAAA AAAAAAGTAA ATCCAGATTT GCAAGTAGAA GTAAAGCCAA TACTCGAG      598

```

## (2) INFORMATION FOR SEQ ID NO:1221:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1221:

```

GAATTCGGCC TTCATGGCCT AGAGGAGTCC TGTCAGTTCG TTCTCTGCTG TGTCCTCAAG      60
ACCATGAATC ATGGCTGGCA TGTAAGTAGC ATTTAATAAT ATATGTTCAA CAAGTATTTG      120
GCAGTCTTGG AGGGCAGAAA AGGAGGTGGG GAAGATTTT AAATAACATT TTTTAAAAAG      180
TCACATTGTC CTACAATACC GATTTTCTT GCATATTAG GAAATTGAGG GTTTTTTCT      240
AAAACATGCG GACATATGGG AAATAGGATG CAACATTGTC ACTAATGTTT CAGACACAGT      300
TAGAGGTTTC CAAGAGATTT TGCCTGGGT CACTCGAG      338

```

## (2) INFORMATION FOR SEQ ID NO:1222:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1222:

```

GCTCGAGTGA CATGGAACT GAGGTCTTAG AGACACGTGT AATGGAGAGG AGAGGAATGG      60
AGACCTGTGC GATGGAAACC AGAGGATGG AAGCAAGGGG CATGGATGCA AGAGGATTGG      120
AGATGAGGGG CCCTGTCCCC AGTTCAAGAG GCCCTATGAC TGGTGGAATT CAGGGTCTCTG      180
GTCCCATTA TATAGGGGCA GGTGGCCCTC CTCAGGGACC CAGACAGGTC CCAGGCATT      240
CAGGGGTGGG GAATCCTGGA GCTGGTATGC AGGTACAGG CATACAAGGA ACAGGCATGC      300

```

AGGGAGCAGG CATAACAAGGA GGAAAAATGC TCGAG

335

## (2) INFORMATION FOR SEQ ID NO:1223:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 534 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1223:

GAATTCGGCC	TTCATGGCCT	AGGTACAGAC	TGAACCCAGG	AACCCGGGTA	TCTGCGTCCT	60
GAGTCCAGC	CCCCACCAGG	ACTGGGGCCT	CCTCACATCT	ACTCTGAGGA	CAGAATCTAT	120
TGGCAGAGTC	TTCCTTTTGT	TTTGGGATGC	TGGGTTTGAG	AACATGCCCG	GAACCAAGAG	180
TCGTGACTAA	TCCAATTTTG	AGCGCTTGAG	GACCAAGTGG	AAAGAACTC	AAGCAGATTT	240
AAAGTGACCA	ATGTCTGGTT	ATGCCCTTGA	GCCCTGCAG	AAGCAAACAA	TAATTTGTG	300
TGTGTGTGGA	CAAATACATT	TGTATTCCAG	ATCTCACAGA	ATTTCCTACA	CAAAGAAATT	360
TGCAAGGAAA	ATGGACATTG	CACCCTAAAA	ATTAACAAGG	AAAGAAGGTA	CCAGGAGCAA	420
CAACTCATTA	ACAGGAACAG	AAACAATATT	GCAAATATTT	CAGATGCAAA	GTGTATCCGA	480
CTTATAATAC	AACTGTCCCT	ACTGTGTCTA	AAGAAATGAA	AGGCAATCCT	CGAG	534

## (2) INFORMATION FOR SEQ ID NO:1224:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1224:

TCACGAATGG	CCCACAGGGA	TCAGGAATGG	TATGATGCTG	AAATTGCCAG	AAAAGTGCAA	60
GAAGAAGAAC	TTTTGGCTAC	CCAGGTGGAC	ATGAGAGCCG	CTCAAGTAGC	TCAAGATGAA	120
GAAATCGCTC	GACTTCTAAT	GGCTGAAGAA	AAGAAAGCTT	ACAAAAAAGC	CAAGGAGCGG	180
GAGAAATCAT	CTTTGGACAA	AAGAAAGCAA	GACCCCGAGT	GGAAGCCAAA	AACAGCTAAA	240
GCAGCAAATT	CCAAGTCAAA	AGAGAGTGAT	GAACCTCACC	ATTCTAAGAA	TGAAAGGCCA	300
GCACGGCCAC	CACCACCTAT	CATGACAGAT	GGTGAAGATG	CGGATTCTCT	CGAG	354

## (2) INFORMATION FOR SEQ ID NO:1225:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1225:

GCAACAAAAC	AAAACAAAAC	ACACTTATGG	TAACCCATTC	TGTTGAGGAG	TCCAAAACCT	60
GAATAAAGCG	CCTCATTGCC	TTTAACTGGT	TCTGTGGCAG	TGAGATCATC	ATCCTTATGC	120
TGGCTCACCT	AGTGTCTCTC	TCTCTCTCCC	GTTTTCTCTC	TCCCTCTCTT	ATCCCCCTGA	180
CTCTCCCCAC	TTCTCATCTT	CTCTTTAGAT	TATGTGGTAG	CTATCCTCAA	GAGCTCATAG	240

TGCCTGCCTG GATCACTGAC AAAGAACTGG AAAGTGTATC AAGTTTCAGG TCCTGGAAGC	300
GCATCCCTGC CGTCATCTAC AGGCACCAGA GCAATGGAGC TGTCAATTGCC CGCTGTGGAC	360
AGCCAGAGGT TAGCTGGTGG GGCTGGCGAA ATGCAGATGA TGAGCATCTG GTACAGTCAG	420
TAGCCAAAGC TTGTGCCTCT GACTCCCGAT CGAGTGGCAG CAAGCTGTCA ACTAGGAAAC	480
GACTCGAG	488

## (2) INFORMATION FOR SEQ ID NO:1226:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1226:

GATCCCCACC AAAACAGGAA AAGAAGTGCT CTCGTGCAGG GCTTGTTTAC AGTGAGCCTG	60
GCTGGCTCCT CATGATCTCT GAGTTTAAAA TGTGCCAGCA GATGATTTTA ACGATCCCAT	120
CAAAAATTGT TGTCTGGATC AGTTTCGAGC TAGCGTTTCC TTGCAGAGGC CATTCTTCCT	180
TTTTTGACAA AAGTTGGGTC GGCCAGGTGC AGTGGCTCAT ACTTGTGATC CACCTGCCTT	240
GGCTCCCAA AGTGCGGGGA TTCTAGGCAT GAGCCACCAC ACCCTGCCAG AAAAATGGAT	300
TTAAAAGAG AATTACAAAG TACTCGAG	328

## (2) INFORMATION FOR SEQ ID NO:1227:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 527 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1227:

GAATTCGGCC TTCATGGCCT AAAATTTTAA AAAAATATTT ATAATGATAG TTAGAGAACT	60
GTTTATATGA GGATCAGACA TTGTTTCAGC ACTGGATCTC CTCTGTCCCC TCTCTTGCTA	120
CAGCATACAG CCCAGAGACA CACATGTAAA AGTAGATGAT CTCTGTAAAC TTCAGCTGCA	180
TTTCTGTATG TGTAGGATTG TCCTANTATC AGATATCCTT TGAGAAAGAG TTGGAGAGGC	240
ATGGAAGGAA GCATATTCCT GACCTCCCCC CTTTTTAGCT AAAGATACAA ATTCAGAGCT	300
GTTTGAAAAG GGCTTAGAAT AATATTAATT AAACATATTC TATAATACAA AGAGAAGTAC	360
TTTTTTAAAA TACATTTATT TTTCTTTCTT TTTTAGCAGG CATTTCTGAC AGAAAATCTT	420
TAGGGCCAAT TAGAGTTTCT TTCTGACTTT TAATTGCCCT CTGCCTTTTG GGAAAGTGTT	480
GAAAAAAGCT CTGGAAAAAA ATATGCTGGT CAAGGTCGCA ACTCGAG	527

## (2) INFORMATION FOR SEQ ID NO:1228:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1228:

GAATTCGGCC	TTCATGGCCT	AAGAAAACAG	CCTAGAATTA	AACCTCCAAG	ATGAGTGTGA	60
GATGAAGCCT	TTCCACCTAT	CCCAACAAGG	TTTAAAAAAA	ATAAAAACTA	GAATGGGGCT	120
ACTACACAAC	AGCCCTTTGC	CCCACCCAAG	GCTCATTTCC	TAGAGGCAAG	TGTACGAGTT	180
TATTTCTCCT	TGAAATTATT	TCCATATCTC	CAAATAGTGT	TTATACCACT	CAAGGCAGAG	240
ATAGCAATTT	GCCTACCCAG	TATACATTTT	CCCTCGAG			278

## (2) INFORMATION FOR SEQ ID NO:1229:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 603 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1229:

GAATTCGGCC	TTCATGGCCT	AGCCACCTTG	AAGCTCTCAA	ATATCACTGT	TGTGAATACA	60
GAGAGGGAAA	ACCAACTGTA	ACGTGCCACC	CAAATTTTTT	CAGATTAATA	CATCATTCAT	120
CAGACTTCAT	TCGTGATCTC	GAAGAGTGAC	ATCAGTCTTC	CTTGGAATAT	GAAGAGAATT	180
TCTTTGGTTC	TTCTTTTGCA	TTTCTATTTG	ATTTATTTTA	TTTTATTTTA	TTTTATGTTT	240
TTTGGTACAG	AAAGCTCATT	ACTAGTCCTG	TCCAGCAACG	TGCCTCTCCT	GGCCCTAGAG	300
TTCTTGGAAA	TAGCCCAGGC	CAAAGAGAAG	GCCTTTCTCC	CCATGGTCAG	CCACACGTTC	360
CACATGCGCA	CAGAGGAGTC	TGATGCCTCA	CAGGAGGGCG	ATGACCTACC	CAAGTCCTCA	420
GCAAACACCA	GCCATCCCAA	GCAGGATGAC	AGCCCCAAGT	CCTCAGAAGA	AACCATCCAG	480
CCCAAGGAGG	GTGACATCCC	CAAGGCCCCA	GAAGAAACCA	TCCAATCCAA	GAAGGAGGAC	540
CTCCCCAAGT	CCTCGGAAAA	AGCCATCCAG	CCCAAAGAGA	GTAACATCCC	CAGAGCCCTC	600
GAG						603

## (2) INFORMATION FOR SEQ ID NO:1230:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1230:

GAATTCGGCC	TTCATGGCCT	ACCGGGCAGT	TAGGCCCAAG	CGCCGGGTTC	AGGCCTCCAA	60
AAACCCCTG	AAAATGCTGG	CGGCAAGAGA	AGATCTCCTT	CAGGAATACA	CTGAGCAGAG	120
ATTAAACGTT	GCCTTCATGG	AGTCAAAGCG	GATGAAAGTA	GAAAAGATGT	CTTCCAACCTC	180
CAACTTCTCA	GAAGTCACCC	TGGCGGGTTT	AGCCAGTAAA	GAAAACTTCA	GCAACGTCAG	240
CCTGCGGAGC	GTCAACCTGA	CGGAACAGAA	CTCTAACAA	AGCGCCGTGC	CCTACAAGAG	300
GCTGATGCTG	TTGCAGATTA	AAGGAAGAAG	ACATGTGCAG	ACCAGGGTGG	TGGAACCTCG	360
AG						362

## (2) INFORMATION FOR SEQ ID NO:1231:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1231:

GAATTCGGCC	TTCATGGCCT	AGTCCCTGTT	CAATTTCTCT	CAGCCTCAAT	ATCTTTTACT	60
TTAAACTAGG	TAGGGTTACC	AGTTCAATGA	TCTGCTCATT	AAATACTTAC	TATACCTTAG	120
GTACTATATG	AGAAGCTAGG	AAAAGAGTGA	TGAAAAAGAC	ACACCTAGAG	AGGGCATTGG	180
ATTATTAAAT	CAGCAGCTAC	TGTAAAGGTA	TTTAAGTTCT	GTGACAGGCA	GCATTCTGGG	240
TATCACAGGA	ACATCTTACA	AGAATTCTTA	ACTTCAGGAG	GAGGGTTCAG	AGAATTAGCC	300
AGGCCAGGGG	TGAGAGTGTT	CTTCCCGGAA	GAGGGAACAA	TGAAGACCCA	GGAGGAGATA	360
CAGAGTATCT	CGCTGTATTT	AAAATAACCA	GAAATAGATT	TATATATTTA	GTACAGAGGC	420
TGAGGGGAAG	AGAAGTGAGT	GTGAGAAGAT	CAAAGGAGA	AGCTCGAG		468

## (2) INFORMATION FOR SEQ ID NO:1232:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1232:

GAATTCGGCC	TTCATGGCCT	ACAATCATCT	CAAACAGTTC	CGGGTTGCTG	CCCTTTTGGC	60
TTTCCTAGGT	GCTACAGTAG	CAGGCTGTTT	TCCCTTTTTC	CATAGAGGGG	AATATTCTGC	120
ATCACCCCTT	TGTTTGCCAT	TTCCTACAGG	TGAAACGCCA	TCATTAGGAT	TCACTGTAAC	180
GTTAGTGCTA	TTAAACTCAC	TAGCATTTTT	ATTAATGGCC	GTTATCTACA	CTAAGCTATA	240
CTGCAACTTG	GAAAAAGAGG	ACCTCTCAGA	AAACTCACAA	TCTAGCATGA	TTAAGCATGT	300
CGCTTGGCTA	ATCTTCACCA	ATTGCATCTT	TTTCTGCCCT	GTGGCGTTTT	TTTCATTTCG	360
ACCATTGATC	ACTGCAATCT	CTATCAGCCC	CCCCTCGAG			400

## (2) INFORMATION FOR SEQ ID NO:1233:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1233:

GAATTCGGCC	TTCATGGCCT	AGGATATAGA	CCAAACCCAA	ATCCTGTTGG	ACAAGGGATT	60
AGACCACCTA	TGGCTGGATG	CAACAGTTTC	GTAGGCGGCA	TGAGTATGTC	GCCAAACCAA	120
GGCTTACAGA	TGCCGAGCAG	CAGGGCCTAT	GGCTTGCCAG	ACCCTAGCAC	CACAGGGCAG	180
ATGAGTGGAG	CTAGGTATGG	GGGTTCAGT	AACATAGCTT	CATTGACCCC	TGGGCCAGGC	240
ATGCAATCAC	CATCTTCCTA	CCAGAACAAC	AACATAGGGC	TCAACATGAG	TAGCCCCCCA	300
CATGGGAGTC	CTGGTCTTGC	CCCAAACCAG	CAGAAATATCA	TGATTTCTCC	TCGTAATCGT	360
GGGAGTCCAA	AGATAGCCTC	ACATCAGTTT	TCTCTGTTG	CAGGTCGCGA	CTCTCGAG	418

## (2) INFORMATION FOR SEQ ID NO:1234:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1234:

GAATTCGGCC	TTCATGGCCT	ACGCCTCTTT	AACACATGGG	CCTTTGTGTG	GACACCATCT	60
TTCCCTGAAA	CCTGTCTGCA	TCTTTTCTGT	CCCTTCTAAC	CATCCAGTTT	GTTCTTCCCC	120
AAGATGGGCT	GCCACAAGTT	GCCATTTTCT	GACTGGTGCA	TGGTTCCAGA	CAGCTCGCGG	180
GCAGACACAG	GGAAGGAATC	TTATCTCGTT	TTTGTTTTTT	TGTTGTTGTT	TTTGTTTTTT	240
TCTTTTTTGT	TGTGGTTGTT	GCTGTTGTTT	TGAAACGGAG	TCTCACTCTG	TTGCCAAGGC	300
TGGAGTGCAG	TGGCGCAATC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:1235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1235:

GAATTCGGCC	TTTATGGCCT	AAAAAAAAAA	AAAGAAAGAA	AGAAAATGTT	GGATATAGTA	60
GGTCTGAGCT	TTATGGAGAA	AGAAGGTTTG	AAGTAGCTTC	TGGGATATGG	AAAAAGAACT	120
TATGAGAGAA	ACAGACTTCT	GGAATCCTT	CAAGGACTAG	AAGAGAACAT	AGATTATGAA	180
AGAATGAGTC	ATTGATCAGT	GTAGTTGTAG	ATTAGAATAG	TTGGACAGTT	AGGATTTGCT	240
AGGCAGAAGA	ATGGAGGAAG	TCACGGCCTA	GGGAGTTAAC	AGTGTTAGGA	GCAAGAGAGG	300
TTTAACTAA	TGAGCCATGG	AGTTTAAGCA	GAGACAATAG	AGAATAAAGT	AAAATAGGAA	360
GAAAAATTTA	AAAAGAAAGT	AGAAAAGTCC	TCGAG			395

(2) INFORMATION FOR SEQ ID NO:1236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1236:

GAATTCGGCC	TTCATGGCCT	ACACAATTCC	AAAGAAGGTG	GTGTGCCACT	TCAGTGGGAA	60
GGCCTATGCC	GACGAGGAGC	GGTGGGACCT	TGACAGCTGC	ACCCACTGCT	ACTGCCTGCA	120
GGGCCAGACC	CTCTGCTCGA	CCGTCAGCTG	CCCCCTCTG	CCCTGTGTTG	AGCCCATCAA	180
CGTGGAAGGA	AGTTGCTGCC	CAATGTGTCC	AGAAATGTAT	GTCCCAGAAC	CAACCAATAT	240
ACCCATTGAG	AAGACAAACC	ATCGAGGAGA	GGTTGACCTG	GAGGTTCCCC	TGTGGCCCAC	300
GCCTAGTGAA	AATGATATCG	TCCATCTCCC	TAGAGATATG	GGTCACCTCC	AGGTAGATTA	360
CAGAGATAAC	AGGCTGCACC	CAAGTGAAGA	TTCTTCACTG	GACTCCATTG	CCTCAGTTGT	420
GGTTCCCAT	ATTATATGCC	TCTCTATTAT	AATAGCATTC	CTATTCATCA	ATCAGAAGAA	480
ACAGTGGATA	CCACTGCTTT	GCTGGTATCG	AACACCAACT	AAGCCTTCTT	CCTTAAATAA	540
TCAGCTAGTA	TCTGTGACGC	TCGAG				565

(2) INFORMATION FOR SEQ ID NO:1237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1237:

GAATTCGGCC TTCATGGCCT ACACTGAGAA CGAGATGGCT ATTTATGAAT TCATTCATAA	60
CTTTGTGGAA GTTTGTAGATG AGTATTTTCAG CCGAGTGAGT GAATTAGATG TATCCTTTTT	120
CAATACTGTT TTCCACAGTA CTTGGCAAAT GCACTCTGGT CCTTATCAGG TAAGTACCAC	180
AAGGCAGGAA AACTATTCAG CAGAGTCCAG AGTGTTTCATC ACCAACAACAT ATGACAAGAC	240
AGCCAGAGGT GTGTGTGTTT TGCAGAACTC CTCCCCAACT TCGTCACCCA AGCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1238:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 303 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1238:

CTCGAGTGGG GGGAGGGAGG GGGAGGAGAG AAGGGGAGGT GGATGGGGGA GGGGGACAGT	60
GGAGGAAGAG GGAAGAGGGA GAAAATAAGG AGAAAGAGAA GGAAAGGCAG AAGGGGAGGG	120
GAAGGGGGAA GGGGAAGAAC AAGGGGAATG GGAAGAGAAT GAAGAGGAAG AGAAGAGGAA	180
GAGTAGGAGG AGAAATAACA AAAGGCACCA GGTGGGAAAG GAAGAATTTA AAATATATTT	240
ATTGCAAAAC GACATTATCC TATAGTGAAA AATCCTTAAA AGTTAGGCCA TGAAGCCGAA	300
TTC	303

(2) INFORMATION FOR SEQ ID NO:1239:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 315 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1239:

GAATTCGGCT TCATGGCCTA CTCTTCTCTG AGACAGAAAA CTAGCGAACC CCAGGGGAAG	60
GTGCCGTGTG GAGAGCACTT TCGGATTCGG CAGAATCTAC CAGAGCACAC CCAAGGCTGG	120
CTTGGGAGCA AATGGCTCTG GCTTCTTTTT GTTGTGTGTC CGTTTGTGAT ACTGCAGTGT	180
CAAAGAGACA GTGAGAAGAA TAAGGAGCAG AGTCCTCCTG GCCTTCGAGG CGGCCAACTT	240
CACTCTCCAT TAAAGAAAAA AAGAAATGCT TCCCCAACA AAGACTGTGC ATTCAATACC	300
TTAATGGAAC TCGAG	315

(2) INFORMATION FOR SEQ ID NO:1240:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 553 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1240:

```

GAATTCGGCC TTCATGGCCT AAAATGACCT TGGTAAGAAT GGGTTTTTAC AATAAATGAA      60
TTTTTAATTC CAAGATGTTT TTTCATTGAA ATTACTGCCC CAGTTGCATT AAAAGTGTGG      120
CTGTGCAAAG CTTCTTCTA CCAGGCTTCA TGTGCAGGAC CTTGGTTTTT GTTGCCCTTG      180
CAATTCCTAAA AGCAGGTGTT GAAAGAGAAG AAGACAGGAA AAAGAAGATG GGAGAAAAAT      240
TTTCCAAATC AGAGTTCTCA GTCCAAGGAC TTATTCTTGG GGGTTCAAAA ATTCTAACAG      300
TATTTTTTAAA TTGCCTCTAT TTCGATGGTT ACTTGATTAA ACTGTTCTAA CATTCTTAAA      360
AATAAAAATT TGCAATGATA ACTTTTATAT CAGACTTTAC CTCTGTTTCC CAAATTGGAA      420
TCTTTAGGAA TATTTTTTTG AGATCACTTT TTCTTTTTT TTCTTTAACA AAGATTGGGA      480
ACCGCTCTTA GGAACAGACA AATGGATTTC CATATTTCTT AAAGCGTTGA AGTAAATCTC      540
TGCCACCCTC GAG                                     553

```

(2) INFORMATION FOR SEQ ID NO:1241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1241:

```

GAATTCGGCC TTCATGGCCT ACTCTTCTCA AGGCTTTGAA ATCTCCCCTT GCACTGAGAT      60
TAGTCGTGAG ATCTCTCCCC GTCTCCCTCC CAACTTATAC GACCTGATT CTTAGGACG      120
GAACCCGAGG CACCTGCGCC GGGCGTCTTA CTCCCCTGTC TTGTTCTGTC CCCTCCCTCG      180
GACCAAACAG TGCTCATGCT TCAGGACCTT GTTGTGCGAA GATGTTGGTT TCCCTTTCTC      240
TGTTATTTAT ATAAAAATAA TTTATCAAAA GGATATTTTA AAAAAGCTAG TCTGTCTTGA      300
AACTTGTTTA CCTTAAATTT ATCAGAATCT CAGTGTGTTGA AAGTACTGAA GCACAAACAT      360
ATATCATCTC TGTACCATTG TGTACTAAAG CACTTGAGTC TAATAAATAA AGAAATCAGC      420
ACCCCTAGGC CATGAAG                                     437

```

(2) INFORMATION FOR SEQ ID NO:1242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1242:

```

GAATTCGGCC TTCATGGCCT AAAAAATAT GTCTTTTGAA AACCNAGTCA AGTACCTAGA      60
GATGAAAACC ACAAATGAGA AACTGTTACA GGAATTAGAT ACACCTCAAC AACAAATGGA      120
TTCACAGAAC ATGAAAAAAG AGAGCCTGGA AGCAGAAATA GCTCACTCCC AGGTGAAACA      180
GGAGGCGGTA TTGCTGCATG AAAAAGCTTA TGAGTTGGAG TCCCATCGAG ATCAAATGAT      240
TGCAGAAGAC AAAAGCATAG GATCTCCAAT GGAAGAGAGA GAGAAATTAC TTAAGCAGAT      300
TAAAGATGAT AATCAGGAAA TAGCCAGCAT GGAAAGACAG TTAACAGATA CAAAAGAAAA      360
GATAAATCAG TTTATTGAAG AAATTAGACA ACTTGACATG GATTTAGAGG AACACCAAGG      420
TGAAATGAAC CAGAAATACA AGGAGCTAAA GAAAAGGGAG GAACATATGG ACACCTTTAT      480
TGAGACTTTT GAGGAAACAA AGAATCAGGA ACCAAAACCTC GAG                                     523

```

(2) INFORMATION FOR SEQ ID NO:1243:



## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1243:

```

GAATTCGGCC TTCATGGCCT AACTGATTAC AGGGAAAGAC AAAAAGCAAA AGGTGATTGA      60
AACATAGTTC TAAATAACAA GAAGGGAAGT TTTCTTAAAC TGATCATCTG TCTTATTGTC      120
ATGACAAAGG GTAAAATTTT ATTTTCAGTC CTTTAGTGCT TTTTAATAAT TCACCATACA      180
TATTTTACTT ATATCCCATT AACTGTGGGA CTTAGCACAG TTTACATTTT CAGTCATGTG      240
AATATAATTA TCTGTATTCC CTGTTGGACT GATGGGGGAA ATTGGATCAT TATATAATTT      300
AAAAGACACC TCCCAGGCA CCCATTGTGT TCTTAGGAAG TCAGTGCTCG AG              352

```

## (2) INFORMATION FOR SEQ ID NO:1244:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1244:

```

GAATTCGGCT TCATGGCCTA ATTCAGCTTT ATCGTTCCCT CTGGCAGTTC AGTTGTTGGC      60
CCAGATTTAT TAAGGTTTGA CAGAAAGCAA CTGAAATCTC CCTTAGAAAT AAAGTTCCTG      120
GTGTGAAGAA AAAAAAGATC CATAAAAAGT CTCATCCTTA GGACAGCAAC TTTTATAATG      180
CACAGCTGAT CTGAATAGCT CTCTGGATTG TGGCCTTGGA CAACAGTTCA GACTGCATTA      240
TTGAGTATGA ACCTTGAGCT TTCTGAGTCT CTTCTTTTGG CTCTTTTACT AGCAGACCCT      300
CTCGAG                                         306

```

## (2) INFORMATION FOR SEQ ID NO:1245:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 591 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1245:

```

GAATTCGGCC TTCATGGCCT AGGGTTTGGG GGTTCCTGAGA TGTTACTCTC ACTGAAGTCT      60
GTGTGGGAGG CGGATTACTA AACAAGAAAT TGCTAATTAA TCTCCAGATG GCAAGGAATG      120
GATAAAGCAC TGTTCCCAAC AAGGTCCAAA TGTCTCCGCT GGAAGAGTGT ACAATGGATG      180
CAGTTGGTCT TCCTGCTGGC AACAGTACCA CCGAAGCGCT TGGGGCAAGT TCCAAATCCA      240
GTAACCTCTT TTTATAATCT TCTTTGGTAA ATTCCCTCCT GGGAAACATG GTTGCTAACG      300
AAAAATTACC GTAAGTGTTG CCAACAGTCT GTGCAGCAAA CTGCCTTGCC TCTTCTAGAG      360
GAGCATCAGA AGGGAACCTGA TTTGTAAAGG AAGAACCATC AGGAAGACGG AATTGAATTC      420
TTGCAACAGT GCTTCTTTCT CTTGCATAAG ATTCCCTCTT GACTTCCATT TCTGCCTGTT      480
TTGCTAGCAA GGCAGCAGCT TTGGCAGCCT CTAATTCTTC CTTTGTCTTT GCAAAACGAG      540
CAGCTCTCTC TGCACGGTCC AATGCAATCT GCTGTTTTAT ACGTTCTCGA G              591

```

## (2) INFORMATION FOR SEQ ID NO:1246:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 593 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1246:

```

GAATTCGGCC TTCATGGCCT ACTTCGGGGA AGAAACCTTC ACCAGAGTGG AGCAGTTCAG      60
ACCATGGAAC CTCTGATCCA AGCAGCCCAG CTCCTGCAAT TAAAGAAGAA AACCCAGGAG      120
GACGCAGAGG CTATCTGCTC CCTGTGTACC TCCCTCAGCA CCCAGCAGAT TGTCAAAATT      180
TTAAACCTTT ATACTCCCCT GAATGAATTT GAAGAACGGG TAACAGTGGC CTTTATACGA      240
ACAATCCAGG CACAACCTACA AGAGCGGAAT GACCCTCAGC AACTGCTATT AGATGCCAAG      300
CACATGTTTC CTGTTTGTGTT TCCATTTAAT CCATCTTCTC TAACCATGGA CTCAATCCAC      360
ATCCCAGCGT GTCTCAATCT GGAATTCCTC AATGAAGTCT GAAGATGCAT GTTTCAGCA      420
TTAGTTTGAT TCCCAATGTG AGCAAGAAGG AAGTATATAC AGTAAAGTAA ATTCAGGAT      480
CTGTAAATC TGGTAAAGT AGATCAAATC AGAGATTGAC AGCCTGTGGA GGGTGTGTA      540
CTATACAGAA TTAGACACAA CTATGTCATT ATTTTGTGTA CCAACTACTC GAG          593

```

## (2) INFORMATION FOR SEQ ID NO:1247:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 599 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1247:

```

GAATTCGGCC AAAGAGGCCT AAATCAGAA TGGTGCTACT TGAAGACTCT GGATCTGCTG      60
ACTTCAGAAG ACATTTTGTC AACCTGAGTC CCTTCACCAT TACTGTGGTC TTAATTCTCA      120
GTGCCGTGTT TGTCACCACT TCTCTTGAG GAACAGACAA GGAGCTGAGG CTAGTGGATG      180
GTGAAAACAA GTGTAGCGGG AGAGTGAAG TGAAAGTCCA NGAGGAGTGG GGAACGGTGT      240
GTAATAATGG CTGGAGCATG GAAGCGTCT CTGTGATTTG TAACCAGCTG GGATGTCCAA      300
CTGCTATCAA AGCCCCTGGA TGGGCTAATT CCAGTGCAGG TTCTGGACGC ATTTGGATGG      360
ATCATGTTTC TTGTCGTGGG AATGAGTCAG CTCTTTGGGA TTGCAAACAT GATGGATGGG      420
GAAAGCATTA TTGCAATCAC AATGAAGATG CTGGCGTGAC ATGTTCTGAT GGATCAGATC      480
TGGAGCTAAG ACTTAGAGGT GGAGGCAGCC GCTGTGCTGG GACAGTTGAG GTGGACATTC      540
AGAGACTGTT AGGGAAGGTG TGTGACAGAG GCTGGGGACT GAAAGAAGCT GAACCTCGAG      599

```

## (2) INFORMATION FOR SEQ ID NO:1248:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 418 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1248:

```

GAATTCGGCC AAAGAGGCCT AACCGAATGG ATTATCTGTG GGAGTAACAT CTCAGAAGAC      60

```

TATGAAGCTA	ATTCTGCCT	CAAGACACAG	AGCTACACAA	AAGGTGGTTA	TTGGAGATCA	120
TGATGGGGTA	GTTATGTGCT	TTGGCATGAA	GAAAGGAGAA	GCAGCAGCAG	TGTTCAAGAC	180
TTTACCCGGG	CCGAAGATTG	CAAGGCTGGA	ACTGGGAGGG	GTTATCAACA	CACCTCAGGA	240
GAAAATTTTT	ATTGCTGCAG	CATCTGAGAT	TAGAGGCTTC	ACAAAAAGAG	GAAAACAGTT	300
CCTCTCCTTT	GAAACAAACC	TCACTGAAAG	CATTAAAGCT	ATGTATGTCT	TTTGTCTCT	360
TTTGTATTTT	TACATACTTA	TTTATAATAT	TTTGATAGA	TGTGAGGCAA	CCCTCGAG	418

## (2) INFORMATION FOR SEQ ID NO:1249:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 800 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1249:

GAATTCGGCC	AAAGAGGCCT	AGCAGAGCAC	AGCATCGTCG	GGACCAGACT	CGTCTCAGGC	60
CAGTTGCAGC	CTTCTCAGCC	AAACGCCGAC	CAAGGAAAAC	TCACTACCAT	GAGAATTGCA	120
GTGATTGCT	TTTGCTCCT	AGGCATCACC	TGTGCCATAC	CAGTTAAACA	GGCTGATTCT	180
GGAAGTTCTG	AGGAAAAGCA	GCTTTACAAC	AAATACCCAG	ATGCTGTGGC	CACATGGCTA	240
AACCTGACC	CTTCTCAGAA	GCAGAATCTC	CTAGCCCCAC	AGACCCTTCC	AAGTAAGTCC	300
AACGAAAGCC	ATGACCACAT	GGATGATATG	GATGATGAAG	ATGATGATGA	CCATGTGGAC	360
AGCCAGGACT	CCATTGACTC	GAACGACTCT	GATGATGTAG	ATGACACTGA	TGATCTCACC	420
AGTCTGATGA	GTCTCACCAT	TCTGATGAAT	CTGATGAACT	GGTCACTGAT	TTTCCCACGG	480
ACCTGCCAGC	AACCGAAGTT	TTCACTCCAG	TTGTCCCCAC	AGTAGACACA	TATGATGGCC	540
GAGGTGATAG	TGTGGTTTAT	GGACTGAGGT	CAAAATCTAA	GAAGTTTCGC	AGACCTGACA	600
TCCAGTACCC	TGATGCTACA	GACGAGGACA	TCACCTCACA	CATGGAAAAGC	GAGGAGTTGA	660
ATGGTGCATA	CAAGGCCATC	CCCGTTGCCC	AGGACCTGAA	CGCGCCTTCT	GATTGGGACA	720
GCCGTGGGAA	GGACAGTTAT	GAAACGAGTC	AGCTGGATGA	CCAGAGTGCT	GAAACCCACA	780
GCCACAAGCA	GTACCTCGAG					800

## (2) INFORMATION FOR SEQ ID NO:1250:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1250:

CAATTGCCAA	GGAAACAGGC	CTTGGCCTGA	AGGTACTAGG	AGGAATTAAC	CGGAATGAAG	60
GCCATTGGT	ATATATTCAG	GAAATTATTC	CTGGAGGAGA	CTGTTATAAG	GATGGTCGTT	120
TGAAGCCAGG	AGATCAACTT	GTCTCAGTCA	ACAAGGAATC	TATGATTGGT	GTATCATTTG	180
AAGAAGCAAA	AAGCATAATT	ACCGGAGCCA	AGTTGAGTAC	TAGGTTAGAA	TCTGCTTGGG	240
AGATAGCATT	CATAAGACAA	AAATCCGACA	ACATTCAGCC	AGAAAACTCTG	TCATGTACAT	300
CACCTATAGA	AGCTTCAGGA	GAATATGGAC	CTCAAGCCTC	CCTCGAG		347

## (2) INFORMATION FOR SEQ ID NO:1251:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1251:

```
GAATTCGGCC TTCATGGCCT ACAGCCCTCT TACTAGGCCA GCACGCTTTC GCTTTTGCAT      60
TTACAATCAC ATACCCCATC CCCTCCACTT GAAAAAGAAT TTTGTTTTTG TCGTTATCCA      120
AAAATCTCAT CTTAAATCAA CCGTCTCGTC TCCCTGTAGC TTCATTACCA TCTCAGAAGC      180
AGCAAAGGAG CCAGCAAAAG CTAAGGTACA GAAAGTCGCT TTGGAGGATG ATGGTGAGTG      240
GTTTACTTAA ATAGAAGCTA TCATTTATTA AGCACCTAAT GTGTGTCTGG AGGGGCTCGA      300
G                                                                                   301
```

(2) INFORMATION FOR SEQ ID NO:1252:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1252:

```
GAATTCGGCC TTCATGGCCT TGCATGCCCC CAGTGAGCTG AGATCGCAGC ACTGTACTCC      60
ATCCTGGGGG ACAGAGCTAG ACTCCATCTC AAAAAAGAAA GTGCCTGGTC GTCTTTCCAC      120
ACGACTCCGT TTCCACTCCC ATAAATGCT ACCTTAGCTG TTTTGAGGGT AGATGCCCTT      180
AGACTGCCAA CTCACAAAGT TTTATTGGGC ACCTGTTACC TGTCAGCAG AGATTTGTAA      240
AAAAAGACAC ATCAGGTGGC CTTTGCTTGC AAGAAATCAG CCTTGGAAC CTGTGGAGAA      300
AAGTTAAATA CTGCGTACTG TGCAAATGAA GGGTGGGAGC TATTGAAGGG AAGAGATTCA      360
CCCTGAAAAC CCAAGAATGG CCAAATCTCG AG                                                                                   392
```

(2) INFORMATION FOR SEQ ID NO:1253:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 610 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1253:

```
GATTCGGCCT TCATGGCCTA GCTGGTCTCT GGTGTCAGGA TCGAATCGCC CCCAGCAGTA      60
TGTGTATATG CATCAGATAA GGTGAGGGAC AACCTTCCTC ACCCCCATAC CTGGCCAGCC      120
TGTAATGGGG AGGAGGCCTT TCTGTGGTGT GGTGGGGCTG GAGATTGGGC AGGGACAGAG      180
ACATACCTTC TCTGGGAATC TGAGAGAGAT ACCTTGAATC TAGGGGAAAG GGATTAGGTT      240
TTGAAAATGT TAGCCATTT GTAAAGAGAA GTCCCTCACC ATTTCCCTTC CCATTAGTCC      300
TGGGAAATAG ATTGGGTAGA GGCTCAGAGC CTGGCCCCTG CTGCACTCCC AGCTTGGAGC      360
TACTGGGTTG TTGACAATGT TTTGGGGTTT CCAGGCCTTA GCAAGAGAAA GCCTCCCCAG      420
ATACCACTCT AGGGGTAGAT GAAGGGGGCA GGAGCCCTGA AGGAAGGATT TGGGGCCGGC      480
CATTCAATCA TTCAGAAACA CTTATCATCC CTTATCAGAA GCCCTGACCT ATTGAGAGTC      540
AGGCACGTGC TATTGAGAGT CAGGCACGTG CTCATATAAA GATGAGTTTA ACATGGATCT      600
CCCTCTCGAG                                                                                   610
```

(2) INFORMATION FOR SEQ ID NO:1254:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs

(B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1254:

GAATTCGGCC	TTCATGGCCT	AGAGGATTTA	CACATGGCAT	TCAGTGTTC	GTATAGATCT	60
GCCTACCTTT	GTGAATTCAT	CTGTAAACCC	CTCTTCCTTT	GAGAGAGCAC	CGGCGATGGT	120
GGTTAACTCC	TGTGTTTTCT	CTCTCTCCTA	CTGGTTATTC	TTGAATTAAG	CACAGACTCG	180
TCAGCTCGGT	TGCTTTATCA	TGAATAATGT	GTGTGACCTT	GCAGTTCTTC	CACAGTTCAG	240
CAACAAGTG	CTAGCTTCAC	TGACCAAAAA	TTAAGGAAGG	AAAACACAGT	TTTTAAAACG	300
ATCCATCTTT	TAACAGCCGA	AACTCGAG				328

(2) INFORMATION FOR SEQ ID NO:1255:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 488 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1255:

GAATTCGGCC	TTCATGGCCT	ACTAAGAGAA	CAATTAGAAT	ATTGGAAGAT	AAAGGGACAA	60
GTACTGAATT	AGTTAAAGAA	AATCAGAAAC	TTAAGCAGCA	TTTGAAGAG	GAAAAGCAGA	120
AAAAACACAG	CTGTCTTAGT	CAAAGGGAGA	CTCTGTTGAC	AGAAGCAAAG	ATGCTAAAGA	180
GAGAACTGGA	GAGAGAACGA	CTAGTAACTA	CGGCTTTAAG	GGGGGAAGTC	CAGCAGTTAA	240
GTGGTAGTCA	GTTACATGGC	AAGTCAGATT	CTCCCAATGT	ATATACTGAA	AAAAAGGAAA	300
TAGCAATCTT	ACGGGAAAGA	CTCACTGAGC	TGGAACGGAA	GCTAACCTTC	GAACAGCAGC	360
GTTCTGATTT	GTGGGAAAGA	TGTATGTTG	AGGCAAAAGA	TCAAAATGGA	AAACAAGGAA	420
CAGATGGAAA	AAAGAAAGGG	GGCAGAGGAA	GCCACAGGGC	TAAAAATAAG	TCAAAGGAAA	480
CACTCGAG						488

(2) INFORMATION FOR SEQ ID NO:1256:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 316 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1256:

GAATTCGGCC	TTCATGGCCT	AGATCCAGAC	ACGGCACTGC	AGCTTTCAGC	TGACTAGCTG	60
TGTGACTTGG	GCAAGCCCCT	TAATCTCTCT	GATCTCGGGC	TCCCTCCTCT	GTAAATGGA	120
ATTAAGAATA	ACCTCATTGA	GGAGCTTCCT	GAGGAGGTAA	GGAAAGTGCC	TGGCACAGTG	180
CCAGGCTGCT	AAGAGATCAA	TAAATGTCCC	ATCCCCCAGC	CCCACCCCAG	TTCTTTCCAG	240
GAATTTGAGA	GACTCCTCCC	CCTGTGTTTG	AAAGTGGCAA	AGTCTGGCAC	ACTTGCCTCA	300
TAACACATAA	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:1257:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 346 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1257:

GAATTCGGCC	TTCATGCCTA	AGCTTCCTTC	AGCAGCGCAG	GCGGTGGTCC	CTGAGGCCCG	60
TGGAAGGAGT	CAAACTTGCG	GGAATTTTGC	AGTTTATCTG	CAGGGCTGTT	GTTTCCAGCA	120
AGACCCAAAG	CTAGAAAAGG	AGGAGGAAGA	AACTGACCCG	ATCAGTGCCA	GAAGTCATTG	180
TATTCAAAGA	AGAATAAGCA	AGAAAGAAAA	GAAGGAAGGA	AGAGAGGTAG	ACAGATACAA	240
GATGAAATCC	TGTCAAAAAA	TGGAAGGAAA	ACCAGAAAAT	GAGAGTGAAC	CAAAGCATGA	300
GGAAGAGCCA	AAGCCTGAGG	AAAAGCCAGA	AGAGGAGGAG	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:1258:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 346 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1258:

GAATTCGGCC	TTCATGGCCT	ACGGCACTTC	AAAAATATAA	ATCAAAGTCC	ATGACTCTAA	60
AAATAACATA	TGCATTGATA	TGCTCGCCCC	TTTGACCCTT	CTCTCAAGAG	AAATTCCCTG	120
CCAAGTAATC	CACATACATA	AGAAGTGTA	AAAGTCCCTA	GATTAAAAGA	GCATAAAACT	180
TCATTATGGA	AACACAGTAG	TCCCGGCTAT	TTGGGAGGCT	GAGACAGGAG	GATCACGAGT	240
CCAGGAGTTT	GAGGCTACAG	TGAGCTATGA	TCGCGCCATT	GCACTCCAGC	CTGGATGACA	300
GAGGAAATAT	TAATTTTGA	GTAATCAGAG	AAAGCCAGGT	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:1259:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 341 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1259:

GAATTCGGCC	TTCATGGCCT	ACCCCATTC	TGCAGGAATA	AATCAAGTGA	GCAGTTCCAG	60
ACTTTTGCA	AATATTTT	CTATGATGCT	GTTTTATTAA	TATTTTCTAA	ATTTCAAAC	120
AAAAAGTGAA	TGTTTGAAAT	TGCTGGGTCC	CGATGTTGGT	GGCTGTTGGA	GTTTTGGACC	180
ACTCGCTAGC	AGTGATTG	AGATTATAAT	TAGCTAAAAT	CCAAAACAAA	AAACCAACAA	240
CAAAAATTGT	ATGGTGCGGA	ACATGCACCT	TGACAATGGT	ACTAACTTGT	TATTCTATAG	300
AACACGTTAG	AATAGATCTA	TTTTTGCCAG	AGCTTCTCGA	G		341

(2) INFORMATION FOR SEQ ID NO:1260:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 416 base pairs  
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1260:

GAATTCGGCC	TTCATGGCCT	AAAGATAAGG	TGGCTGTAAA	TGCGTGGATT	TATACCTGAG	60
TTCTCTCATC	TGTTTCACTG	ATCCATGTGT	CTGTTTTTAT	GCCAGTACCA	TGCTGTTTTG	120
ATNACTATAG	CTTTGTAATA	AATTTTGAAG	TCAGGTAGTG	TGATNCCTCC	AGCTTCATTC	180
TTTTTGCTCA	GGATNGCTTT	GGNTATTCAT	AGTCTGTGG	TTCCATGTAA	ATTTTAGGTT	240
TTTTTTTTTT	TTTTTTTTTT	TTTTTACTAT	TTCTGTGAAG	AATGTTATTG	GTATTTTGAT	300
AAGGATTGTA	TTGAATCTGT	AAATTGCTTT	GGGTAGTCTT	GTCATTTAAA	AATATTGTTA	360
TAGTTCTTCT	AATCCATGAA	CATAGAATAC	CTTCCATTT	TTTGGTGTG	CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:1261:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 86 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1261:

GAATTCGGCC	AAAGAGGCCT	AGGCAGACAT	CCATAAACAT	TTTCAAAATG	CAGGGTATGT	60
TTTTTCAGTG	TAAGGCAACT	GTTCTG				86

(2) INFORMATION FOR SEQ ID NO:1262:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 332 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1262:

GAATTCGGCC	AAAGAGGCCT	ACTTTTGGTA	ATAACATTTT	AAAGCAGGAA	GTATCTACGG	60
TGTGATCGTG	GTACAGCTCT	TAGTTCAAGT	GTGAAGACAT	TTGGTTGTCT	TGTATATGAC	120
CTAGAAGAAG	GGGCGTCTGC	TGGAAAACAA	TGCTGTTCTT	TTTCTCTTTG	TTTTTTGGGA	180
CGGGGTCTTA	CTCTGTTGCC	CAGGCTGCAG	TGCAGTGCCT	CAATTTTTC	GTTCAGTGCA	240
GCCTCGACCT	CTGGGGCTTA	AGCGATCCTC	CTGCCTCGGC	CTCCCCAGTG	ACTGAGACCG	300
CAGGCACACA	CCACCACACC	CGGCACCTCG	AG			332

(2) INFORMATION FOR SEQ ID NO:1263:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 279 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1263:

GAATTCGGCC	AAAGAGGCCT	AAGCCAGGGT	AGGGACAGCA	GA CTGGCAGG	AATGAGTGAC	60
AGTTCTATGC	AAATGGAGTT	ATTATTATTA	TTGTTATTAT	TAATAAGGGC	AGGTTTGATC	120
CAGAACTGCC	CAGTATGGCC	TGTGACTTCT	GCGCAGCAAT	TATTTCTCCA	GGGACAGGGC	180
CTGAAGCTAC	CTCACAGTGA	TGCAAAAAAA	TGGGATTCCC	CACTAACCCC	CACACACACC	240
CCCTTCCTAC	CAAACCACAC	ATCTCTCAGT	CCTCTCGAG			279

## (2) INFORMATION FOR SEQ ID NO:1264:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 629 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1264:

GAATTCGGCC	AAAGAGGCCT	AGGATCACGG	AGGTGGTGCC	TGTGTGTCCC	ACAGGAAGCA	60
AAAGCTGATG	CCCAGTTCCC	AGCATACCTA	AGTAAACTTC	AGGTCCACTC	CCAGCAGGTT	120
TCTCGTGATA	GTAAACTAT	GAAGGAATC	AGTGTACAAG	GAGCTTCTAC	AAAATAGGCA	180
GAAGACAGTA	GCCAGATGGG	CCAAGGGCCC	CAGCCACCCA	CGCCCCCTCC	TCTCCTTGAA	240
GACCTTCGGT	TCCAACCCCA	CCATCAGCAG	GGCTCTGCTC	AGTTCCTCCT	TATGTGTATC	300
ACCACAGGGC	TGCTGGCTCG	TGTCACGTT	ACCACCAGAC	CCCACATCAG	GAGTCCCGCC	360
AGGGGTGTGG	GGAGGCAGCG	CTGCCTGGTT	GGCCGTGGAG	CCGTATGGAA	CATGGTGCCT	420
CACAGGCAGT	CTGCTTGGCG	TCCTGGATCC	TGGCTGTATC	CCGCTGGAAA	GGATGTGTGT	480
GGGTCTAAGA	TATGTATATA	ATAGAAACAT	TTATTCAGAA	GCTTTAGTCA	AGACTTCATT	540
TTTAAGTTCA	GAGTAATAAA	CTCATAGTCT	AAATTTCCCTA	ATTTTCTGT	TTAATTTACA	600
TAAATAAAAT	GAAATGCAAT	TTCCTCGAG				629

## (2) INFORMATION FOR SEQ ID NO:1265:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1265:

GAATTCGGCC	AAAGAGGCCT	AGAGGTGCCC	ATTTCAATAA	ATTTTAGCAC	ACTGGATGAT	60
AAAGGAGAAA	TGCTTTGGTT	TAAGAGAGGG	AAATCTTTGT	TACCAATACT	ATCGGTGAGT	120
TCACCTAATA	CTTCCTCGTC	ATCAAGTTCA	TGGAGTACG	CATCTTCTTC	ATCCTCATCT	180
CCCGGTTTCAG	TGGGTTCACT	TTTGACAGGG	CACTCCCCGT	TTGGGTGTAA	AACGTTGCTT	240
TCTTTTGGCC	TTTCACAGTT	GTTCTCTTGG	TCTTTGCTCT	CTGACATCTT	GCTAGACTCA	300
GACGATGAGT	GGCTGAGGGA	GACAGAGGTA	ATTGGGGTGT	TCACTACTAA	ACTAGACAGC	360
CCCCCAGAT	TCACTTCAGC	CTTTGGCATT	TGGGTAATCC	CCAGCGGCTG	CTCTGCTGAG	420
CTCGAG						426

## (2) INFORMATION FOR SEQ ID NO:1266:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double



(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1266:

```

GAATTCGGCC AAAGAGGCCT ACCGCCCATC GCGCCGGCGC GACCCGCAGG AGCGTAGAGA      60
GCGCGGGACT AGAGTGCAGA GCTCCGGGAC GTGGATCGGA GCCGGCGCGA TGGGCGGAGA      120
GCAGGAGGAG GAGCGGTTTCG ACGGCATGTT GCTGGCCATG GCTCAGCAGC ACAGGGGCGG      180
CGTGACAGGAG CTTGTGAACA CCTTCTTCAG CTTCCCTTCGA CGCAAAACAG ACTTTTTTCAT      240
TGGAGGAGAA GAAGGGATGG CAGAGAAGCT TATCACACAG ACTTTCAGCC ACCACAATCA      300
GCTGGCACAG AAGACCCGGC GGGAGAAGAG AGCCCGGCAG GAGGCCGAGC GGCGGGAGAA      360
GGCGGAGCGG GCGGCCAGAC TGGCCAAGGA AGCCAAGTCA GAGACCTCAG GGCCCCAGAT      420
CAAGGAGCTA ACTGATGGAG AAGACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1267:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1267:

```

GAATTCGGCC AAAGAGGCCT AGCTACTAAG GCAGGTGCAG CATCAATGAT TCACTACATG      60
GTTCTGATAT CAGCTCGCTT GGTACTACTC ACTTTGTGTG GATGGGTACT TTGTTGGACC      120
CTCGTCAATC TCTTTCGAAG CCATTTCAGT CTCAATCTCC TTTTCCTTGG CTACCCGTTT      180
GGTGTGTTATG TTCCTCTTTG CTGTTTTTCAT CAAGATAGTA GAGCACATCT TCTTCTCACA      240
GACTACAACT ATGTGGTTCA GCACGAGGCA GTAGAGGAAA GTGCCTCGAC TGTGGGAGGC      300
TTGGCCAAAT CCAAAGACTT TCTCTCCTTG TTGCTGGAGT CGCTAAAAGA ACAGTTTAAT      360
AATGCCACAC CCATCCCCAC CCACAGTTGT CCCCTATCTC CAGACCTCAT TCGCAATGAA      420
GTAGAATGTC TGAAAGCAGA TTTCAACCAC CAACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1268:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1268:

```

GAATTCGGCC AAAGAGGCCT AGAGTTTTC AAGCCCGGC TGGTGTAA AACGTGTTTT      60
GGCTTTGTTT ATTTTATGGT GTTGGTGTG GTATTGGTGG TCATGTACTG GCATGTAAGA      120
TTTCTTTTCT CTTTCCCTCT TCTCTCTGCT TCTACATTCT GTTCATTGAG GCTTCCAACT      180
GAATATGAGA GGAACGGGAG ATATGAGGGC TCAAGTCGCA ATGTATCTGC TGAGCAAAAA      240
GATGAAAACA AAGAAGCAAA GCCTCGATCC CTACGCTTCA CCTGGAGCAT GAAAACCACT      300
AGTTCAATGG ATCCCGGGGA CATGATGCGG GAAATCCGCA AAGTGTTGGA CGCCAATAAC      360
TGCAGTATG AGCAGAGGGA GCGCTTCTTG CTCTTCTGCG TCCACGGAGA TGGGCACGCT      420
GGTAACCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:1269:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1269:

```

GAATTCGGCC AAAGAGGCCT ACCCTGAAC ACTCCAGTGT GCACCTGCAC AACCTCCATG      60
GTGCCTCTGG AATTGGGTAG CATGGTGGCC CTGCTGATGA GCACCCAAG GGGCCATTGG      120
GGGACCTCTG AGAATCTCTG CCAGAGCAGT TTGGGTGGGA GTCGATTAAG GAAAGAAGCA      180
GCAAGATCCA GGACTTTTAA TCTTAAAAGA GAGAGAAATG CTGGCAGATG AACATTCTGA      240
GGATAAGGAG CCTGAGTAAT TGAGCGATTA GGGATGGAGA CATACGATTG AATTCTAGAC      300
CTGCCTCGAG TAGCCAATCA AGCTGTGTCT GGCTGTGCAC TATCCAGGCC TCCACATTCT      360
GTGACAAACT AACAGGGCCG GCTCCTGTCA CTCCTGTTCT CGCCAGCGGG TTTTACCCTG      420
AAGGTGACTC AGGCCTTCTC TTTGCCCTAG ATCGTGGGGA TCATCACACG GCACAACCTC      480
ACCTATGAAT TTCTGCAGGC GTAGCTCGAG                                     510

```

## (2) INFORMATION FOR SEQ ID NO:1270:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1270:

```

GAATTCGGCC AAAGAGGCCT ACGCATCCCC TGCAGCTCTT GCCCCCAGAC GTTTGGTACC      60
AACTCGAAAC TGCCTTGCA CCGGTTAAGG GTACATGACA AAACACCTAC CCACTTCTGT      120
CCACTTTGTG ACTATAGTGG CTACCTTCGC CATGACATCA CTCGTCATGT CAACAGCTGC      180
CACCAAGGCA CCCCAGCCTT TGCCTGCTCC CAGTGTGAAG CCCAGTTCAG CTCAGAGACA      240
GCACTTAAGC AGCATGCTCT GCGCCGACAC CCCGAGCCTG CACAGCCTGC CCCTGGCTCT      300
CCTGCAGAGA CCACTGAGGG CCCCCTGCAC TGTCCCCGCT GTGGGTTGCT GTGCCCCAGC      360
CCTGCCAGCT TACGAGGACG GCCTCGAG                                     388

```

## (2) INFORMATION FOR SEQ ID NO:1271:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1271:

```

GAATTCGGCC AAAGAGGCCT ACAGAACTGT GCCATATTCT TAAACATCAT ACAATATTGC      60
CTTTCAGGCA TGAAAAGCAA AGGGAATTAT TTGTTTCAATT GATAGCGCTT TAGTAATGTA      120
AGTGGATACA CTTAGGGCTA GCCCTCTGGC TTGTTACCAT GGTAAGCTAG GGGAAATATAG      180
TTGAGGGGTC TGCAGCAGAG CTTGGAGAGG ATCTGGGATG TTAAATTCTC AAGTACTTGA      240
ACTTAGCAAC AGGACTTGGT CCCATCCACA CCCTGCTCTC CACCCAGCT GGAAATAATT      300
AGTGCTGACT ATGGAGGCAA AGAGAAACAT ACTTGTAAGC TTTTGTGTTT GGATTTTCTT      360
TGGGGTTTCC TTTTGTCTT TTCTGAACTG GAGGGTGAAA TCTCGAG                                     407

```

## (2) INFORMATION FOR SEQ ID NO:1272:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1272:

```

GAATTCGGCC AAAGAGGCCT ACATAAATCA AAAATTTCTG TGAAGATGGG AAATAAGGCC      60
AAGATTGCAA AATGTCCTTT AAGAACAAAA ACTGGGCACA TTCTAAAATC AACACAAGAT      120
ACTTGTATTG GGAGTGAAAA ACTTTTGCAA AAGAAGCCAG TTGGTTCAGA AACATCACAG      180
GCAAAGGTG AAAAAAATGG AATGACTTTT TCATCCACTA AGGATTTATG TAAACAATGT      240
ATAGATAAAG ACTGTCTTCA TATCCAGAAA GAGATTTCAC CTGCAACCCC TAATATGCAG      300
AAGACTAGAA ACACCTCGA G                                     321

```

## (2) INFORMATION FOR SEQ ID NO:1273:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1273:

```

GAATTCGGCC AAAGAGGCCT ACGAGAACTT CCTTTTCATC TGAATCTTCG TCAAACCTCTC      60
TCTCAGAGCC TTCCTCATCT AACACTTTTT CAGAGCCGTC ATCTTCAAAT TCGGAGTTTT      120
CAGAGTCATT TTCTTCTAAC TCTTGTCAA GAACATTTTC ATGAAGCTCC TTTTCAGAAC      180
CTTCCTCGTC CAAATCTTTC TCGAG                                     205

```

## (2) INFORMATION FOR SEQ ID NO:1274:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1274:

```

GAATTCGGCC AAAGAGGCCT ACTCAATACT GAGGCTGATT GGTCGTTTAG GCCAATTGGG      60
TTTGAAAGAA GGATTTCCAT CTGCTGTGAA AAATATTAGT TCGGTTATTG GTATGTTTAT      120
ACAGCATGCT CACGATGAAG ATATACCATG GGGTATACAG TTAGCAGCCG TGTATGCTCT      180
TTGTGACTTG AGTCCCAGCA ATCCAGCAGA AATTTCCAAG ATCCTGGAAG CTTGGCGGAG      240
AGAGGCCTCC AAAAGCGTTC CGTCTGCGAT TGTCAGCTGC CTAGAGGAAG TCAGTGCCCT      300
GAGCACAGAG GAGCTTGGCT GACCTGGGAT GCCACTGAGG CTTGAGAAGT GCCTTGACAC      360
ATTTGAACA CAAATAGTTT GATCAGCTTT CAGAATACAA AGGGAGGTTT CAAAACAAAA      420
AGACATAAAA TAGATAAAA GAGACTCGAG                                     450

```

## (2) INFORMATION FOR SEQ ID NO:1275:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 255 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1275:

GAATTCGGCC AAAGAGGCCT AAAGCAACAG GAAAGGATAA ATTCACAGAG GGAAGAGATA	60
GAAAGACAAC GGAAATGTT AGCAAAGCGG AAACCTCCTG CCATGGGTCA GGCCCCCTCT	120
GCAACCAATG AGCAGAAACA GCGGAAAAGC AAGACCAATG GAGCTGAAAA TGAAACGTTA	180
ACGTTAGCAG AATACCATGA ACAAGAAGAA ATCTTCAAAC TCAGATTAGG TCATCTTAAA	240
AAGGAGGCTC TCGAG	255

(2) INFORMATION FOR SEQ ID NO:1276:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 367 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1276:

GAATTCGGCC AAAGAGGCCT AACAAGATTG ACCGTGAATG GTTCACTGTT GAAACTCTGT	60
GATGGGTACT TGAGAATTTA TTATATTATT ATGCCTATAT TGCAGATATT TGAAGTTTCC	120
CAATAAAATG TTTAAAATAG TGGCAGGGGG CAAGAAGAAA AGGACCACTC AATTTAAAGA	180
AAAAATAATT TTTAAAGACA CAGAGAATAG GAAGAGGGAA AAATTGGTGA GGCAAGAGAA	240
AGGCAGCAGG TGGGGCCATA TCAAGAGTGA TTCTTCAGCA GGTGAGGCGT GATACCACCG	300
CAAAAGTAGA GGGTTGGCTG TAAGATAGGG GGCACAGATG GCTATAATGC AAGGGAAGGC	360
GCTCGAG	367

(2) INFORMATION FOR SEQ ID NO:1277:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 624 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1277:

GAATTCGGCC AAAGAGGCCT ACTCAGAAAC AAAGCCAAAA TTAAGTTCAT CATTAAAAAG	60
CCCGAAATGT TTGAGACGGC GATTAAGGAG AGCACCTCCT CTAAGAGCCC TCCCAGAAAA	120
ATAAATTCAT CACCCAATGT TAATACTACT GCATCAGGTG TTGAAGACCT TAACATCATT	180
CAGGTGACAA TTCCAGATGA TGATAATGAA AGACTCTCGA AAGTTGAAAA AGCTAGACAG	240
CTAAGAGAAC AAGTGAATGA CCTCTTTAGT CGGAAATTTG GTGAAGCTAT TGGTATGGGT	300
TTTCCTGTGA AAGTTCCCTA CAGGAAAATC ACAATTAACC CTGGCTGTGT GGTAGTTGAT	360
GGCATGCCCC CGGGGGTGTC CTTCAAAGCC CCCAGCTACC TGGAAATCAG CTCCATGAGA	420
AGGATCTTAG ACTCTGCCGA GTTTATCAAA TTCACGGTCA TTAGACCATT TCCAGGACTT	480
GTGATTAATA ACCAGCTGGT TGATCAGAGT GAGTCAGAAG GCCCCGTGAT ACAAGAATCA	540
GCTGAACCAA GCCAGTTGGA AGTTCCAGCC ACAGAAGAAA TAAAAGAGAC TGATGGAAGC	600
TCTCAGATCA AGCAGAACCT CGAG	624

## (2) INFORMATION FOR SEQ ID NO:1278:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1278:

```
GAATTCGGCC AAAGAGGCCT ACCCAAATCC CATTTAGATA AATTGAGGTT CATTTTTTCAC      60
ATAGACTTGC AATTTTTAGA CACCACATTT TTTTATAGT AACAGCCTCA TTGCTCTGTA      120
CAATAACTAA TAATACAGTA TTTCATAGGT ACATTGTATG TGCACAGGAA ATTTTCTTT      180
AAATCTTAAA AGCCTTTAAT AAACGGGATA TTTAATATT TTAATGTTAC TACATTTAAA      240
AAATAGTGTT TTCCTACAAA ATTTCTGTGA TTCAGTAATA CTCGAG                      286
```

## (2) INFORMATION FOR SEQ ID NO:1279:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1279:

```
GAATTCGGCC AAAGAGGCCT ACTCATCATT AGCTGAAAGT TTGAGAGCTG CAGCAGAAGC      60
GGCTGTATCA CAGACTGGAT TTAGTTATGA TGAAATACT GGACTGTATT TTGACCACAG      120
CACTGGTTTC TATTATGATT CTGAAATCA ACTCTATTAT GATCCTTCCA CTGGAATTTA      180
TTACTATTGT GATGTGGAAA GTGGTCGTTA TCAGTTTCAT TCTCGAG                      227
```

## (2) INFORMATION FOR SEQ ID NO:1280:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 486 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1280:

```
GAATTCGGCC AAAGAGGCCT ACCCGTGGCG TCTACAAATA GTTCCGTGAG AAAGATGGCC      60
GGGAACCTGA TCCTGCTGGC TGCTGTCTCT ATTCTCTCGG CCTGTCAGCA AAGTTATTTT      120
GCTTTGCAAG TTGGAAGGC AAGATTAAAA TACAAAGTTA CGCCCCAGC AGTCACTGGG      180
TCACCAGAGT TTGAGAGAGT ATTTGGGCA CAACAAACT GTGTGGAGTT TTATCCTATA      240
TTCATAATTA CATTGTGGAT GGCTGGGTGG TATTCAACC AAGTTTTTGC TACTTGTCTG      300
GGTCTGGTGT ACATATATGG CCGTCACCTA TACTTCTGGG GATATTCAGA AGCTGCTAAA      360
AAACGGATCA CCGGTTTCCG ACTGAGTCTG GGGATTTTGG CCTTGTGAC CCTCCTAGGT      420
GCCCTGGGAA TTGCAACAG CTTTCTGGAT GAATATCTGG ACCTCAATAT TGCCAAGAAA      480
CTCGAG                      486
```

## (2) INFORMATION FOR SEQ ID NO:1281:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 430 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1281:

```
GAATTCGGCC AAAGAGGCCT AGACAAATT CCTTTCATTG CTTCCAGCCG TGTATTATAA      60
AGTAATTAAC CTTAATTTAT AAATTTTAT ATCAAAGTGC CTTTAACTT TTAGAACTGG      120
CAGGAACAGC CTTATCCCTG GGCTCCTAAT AGTTCTCCAT TTAATCAAAA TTCATCCATC      180
AGGTTCCAGT GTTAAATCAT CTTTAAATG GGAGTTACAT TCTGGTTAAT AGTTTATAA      240
TTCGCCTCCT CTAATAGTTT TTACCACAGG GATCTCGACT CCATTTTCC TGA CTCTATT      300
ATTGCTGGCA TCGATTCT GCGGGGATGG CTTAACGCGG CCCTGCCTCT CTGGCCTCTG      360
CTGGTCGCCT CTTTGTTCT TGGTGGTCTC ATTAATTCCT GAGAAGAGTT ATCCTTCCTC      420
CTCACTCGAG                                     430
```

(2) INFORMATION FOR SEQ ID NO:1282:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 333 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1282:

```
GAATTCGGCC AAAGAGGCCT AATCCCCTTC TGCATGTTCC CTTCTGCAG GTCTGATGGG      60
GCCATCCAC CCTGCTGGGG AGCACAGCTT GCCCTCCCTC CCCTCCTTCT CTTCTGGCGT      120
TGCCTGCTGG GTGCCATCGG AGCAGTCCTC ATTACTCCC ACTTTGCCC AACTTCTGCT      180
GCTGTGACCA GTCGCATACA CGTGACACC GTGGGGACTG CCCCTCCATA CAGCTCCTCT      240
GTAAGCTTAG GACCAAGGCT GCCTCTCCAG TCTCCCTGGC CCATGCCTGC CCCGGCATCC      300
TCCGCCCCAG CTACACTGGC CCCCCTCTC GAG                                     333
```

(2) INFORMATION FOR SEQ ID NO:1283:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 269 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1283:

```
GAATTCGGCC AAAGAGGCCT AGGACGTTGG TGTGAGGTT AGCATACGTA TCAAGGACAG      60
TAACTACCAT GGCTCCCGAA GTTTTGCCAA AACCTCGGAT GCGTGGCCTT CTGGCCAGGC      120
GTCTGCGAAA TCATATGGCT GTAGCATTCG TGCTATCCCT GGGGGTTGCA GCTTTGTATA      180
AGTTTCGTGT GGCTGATCAA AGAAAGAAGG CATACGCAGA TTTCTACAGA AACTACGATG      240
TCATGAAAGA TTTTGAGGAT GAGCTCGAG                                     269
```

(2) INFORMATION FOR SEQ ID NO:1284:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1284:

```
GAATTCGGCC AAAGAGGCCT AGAGCGTCAA TTATATCAAT TTGTCCAGAG TTTGGATGAG      60
CTGTGAGGAT GTAACACAAG GCTGGAGGAG GCAGATGAGT TTTATCTCT TCACAGGGCT      120
GGTCGCGGCC AGGTGTTTTT AGAGGTATCG CTGGGGGCCA CAGGGTGTCA ATCAAAGTGA      180
AAATCCCCGC TGTCTTCTCT CTGGTGACTT TCTGTAGAAC CTCATTCCC ACCAGGCTGC      240
AAGACTTCCC TTCCAAGTGT CTGCTTCTCG ACATGGTGAA CTCCAAGTGC ACTTCACCGA      300
ACATTCCACA GGCATCTTGT ACCAGAAGGC AGGCTCGAG                                339
```

(2) INFORMATION FOR SEQ ID NO:1285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1285:

```
GAATTCGGNN AAAGAGGNCT AGAAATCANA AAGCATGCCT GTGCAATTGA ACAAAGGGCT      60
AAGTTCTAAA AACATCAGTT CATCTCCAAG CGTTGAGAGT TTGCCTGGAG GAAGAGAATT      120
CACTGGCTCT CCACCTTCAT CTGCTACTAA AAAAGATTCC TTTTTTAGCA ACATCTCAGC      180
TTCTCGCTCA CACAGCAAAA CTATGGGCAG AAAAGAATCT GAAGAAGAAT TAGAAGCCCA      240
AATTTCTTTC CTTCAAGGGC AGTTGAATGA CCTGGATGCC ATGTGCAAAT ACTGTGCAAA      300
GGTGATGGAC ACTCATCTTG TAAATATTCA AGATGTGATA TTACAAGAAA ATTTGGAAAA      360
AGAAGATCAA ATTCTGGTTT CCCTGGCAGG ATTAAACAG ATCAAAGACA TTCTAAAAGG      420
TTCCCTGCGT TTTAACCAGA GCCAGCTAGA GGCCGAAGAG AACGAACAGA TCACCATTGC      480
GGACAACTCA CTCGAG                                496
```

(2) INFORMATION FOR SEQ ID NO:1286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1286:

```
GAATTCGGCC TTCATGGCCT AGCAGAAGCT AAGAACTGTC TTAATAATAA TTTTAAAGT      60
AAATAAGTTA TAATGCATAG GTTAGCCCAT TCATTAATGA TTTTCAGTTT CAAGTGTAAT      120
TATTTCTTAA TGATTACTAG TTGATCAGTG TAATGAAAAC ATTGAGTAGA CAACTAAAT      180
GCACAGTATA AATGTGACAT AAACACTGGT TTCAATTTGT CTCAAGAAAA AAGAAAAAAA      240
AAAGGCCCCCT GCAATGGCAA AGAGTGGCCA CTATTGGGGT AATTCAAACA ACCCACTGTA      300
ATACAGGAAA GCACTCGAG                                319
```

(2) INFORMATION FOR SEQ ID NO:1287:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 261 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1287:

AAAATGGAGA AGTTACTGGC TGGAGAAGAT GGGACAAGTG AACGAAGGAA AAGCATCAAA	60
ACCTACAGAG AAATTGTTCA AGAAAAAGAG CGGAGAGAGA GAGAGCTGCA TGAAGCATAT	120
AAGAACGCTC GGTCCCAGGA GGAGGCAGAG GGGATCCTTC AACAGTACAT TGAGAGGTTC	180
ACCATCAGTG AGGCTGTTCT CGAACGCTTG GAGATGCCAA AAATTCTGGA AAGAAGCCAT	240
TCAACAGAGC CAAAACTCGA G	261

(2) INFORMATION FOR SEQ ID NO:1288:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 275 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1288:

GAATTCGGCC TTCATGGCCT ACTCTGAAGA TATTATAGC TCTCTTAGAG GTGTCACTGA	60
AGCAATCCAG AATTTCAGCT TCCGTAGCCA AGAAGATATG AATGAGCCAT TGAAGAGGGA	120
TTCTAAAAAA GATGATGGCG ATTCAATGTG TGGTGGTCCT GGGATGTCTG ACCCAAGAGC	180
AGGAGGTGAT GCTACTGACT CAAGTCAAAC AGCTCTTGAT AATAAAGCTT CATTGCTCCA	240
TTCAATGCCT ACTCACTCCT CTCCACGCTC TCGAG	275

(2) INFORMATION FOR SEQ ID NO:1289:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 139 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1289:

GCGATTGAAT TCTAGACCTG CCTCGAGAAC GCCGGGGTCC ATCATTAGCA GTCCTCACAT	60
GCGCCGGAGA GCTACATCAA CACGAGAGTG TCCATCTCGC CCACACCAGA CTATGCCCAA	120
CTCATCTTCC CCCCTCGAG	139

(2) INFORMATION FOR SEQ ID NO:1290:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 358 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1290:

```

GAATTCGGCC AAAGAGGCCT AATAAGTTTG ATTAAGCTTG CAGACATTAA GCTTTTCTAG      60
CAGCTGGTGT GTGCAGAGGC AGATGGCTCT CTGGTTCCAG GACTACCTAC AATATAGAGA      120
AATTTTCTCT ATTCCAGTCA ATTCATCATG GGTAAGAATA GTCCATTTTG GTAGTGTAT      180
TTCATCGTTT ACAATCTACC TATGGGTAGT GGCTGGTAAC TGCCTGGATG TTGACATTTT      240
ACAAAGGCCA TACTTAACCA CACTTTTATT TCTATTTGTG CGATGCCTTG GAGTAGTTTC      300
CCAAAGTGAT TTTGAGTGTG GAAGAAATGG TATTGTCCCC GAACAGCTGG TGGTCGAG      358

```

## (2) INFORMATION FOR SEQ ID NO:1291:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1291:

```

GAATTCGGCC TTCATGGCCT AGAGGATCCT AATGAAATAC CTGAAACATA TATTGGCATT      60
TATCAATGGC TCAAATCTTC ATTTATCTCT GGCCTTAACC CTGGCTCCTG AGGCTGCGGC      120
CAGCAGAGCC CAGGTCGAG                                     139

```

## (2) INFORMATION FOR SEQ ID NO:1292:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1292:

```

GAATTCGGCC TTCATGGCCT ACTATCAGGA AGTGATTCTG GGAGAGGGGA TTTTACCTGA      60
TGGTGGAGAA TACAAACCCC CTTCTGATTC TTTGAAAAGC AGAGACTATT ACACGGATTT      120
CCTAATTACA CTGGCTGTGC CCTCGGCAGT GGCCTGGTTC CTTTTTCTAA TACTTGCTTA      180
TATCATGTGC TGCCGACGGG AAGGCGTCAT CCAACTGGTC CATCACAGTG CTATTCAGAA      240
ATCTACCAAG GAGCTTCGAG ACATGTCCAA GAATAGAGAG ATAGCATGGC CCCTGTCAAC      300
GCTTCCTGTG TTCCACCCTG TGA CTGGGGA AATCATACT CTTTACACA CAGACAACTA      360
TGATAGCACA AACATGCCAT TGATGCAAAC GCAGCAGAAC TTGCCACATC AGACTCAGAT      420
TCCCAACAG CAGACTCTCG AG                                     442

```

## (2) INFORMATION FOR SEQ ID NO:1293:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1293:

```

GAATTCGGCC TTCATGGCCT ACATGAATTA TCTGTGAGTT GGTAAAGGT AATATTGGTT      60
AGCATCAAGA ATAGGAAGCT ATTAGTTTTT AATCAAGAAT AAGCTCAAAT TTGGTCTAAA      120
TCTTAATTTT AAGCTGGGTA ATCATTGATT TACAATTTTT TTCTTGGTGT CACATTCTTT      180
CCAAAACAAT AATCAATGAA GCCTTTCCCA CCCTGTGCCT TTGCTCTCGA G                231

```

## (2) INFORMATION FOR SEQ ID NO:1294:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 355 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1294:

```

GAATTCGGCC TTCATGGCCT ACTCTGCTAA CTCCTGCCT CTATGTCTTT CCCACCTAC      60
CTCCTCTCCC CATTCACTACT CCTGCGTGAC CTCATCCATT TACCTGCCTT CAATTAGCAT      120
CCATACGTTT CTCCTTTCTC AATATAAGTC CCCAGCTGAG ACTCTGTTTC TGAAATCCAG      180
ATTTTATTTT CCAATTCTAC TGAACAACT CAGTCTAAAG CCAAGCCCAT TATCTTCTCC      240
TATAAGCCTG CATCTTTTCT TTTCTTCTT TCTTTTTTTT TTTTAAACAG AGGTTAATGG      300
CATTCAACAT CTACCCAAGC ACCAGGGAGT TAGATTGAGA ACGGATGGAC TCGAG          355

```

## (2) INFORMATION FOR SEQ ID NO:1295:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 429 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1295:

```

GAATTCGGCC TTCATGGCCT AGGCTAACTG TTATTTGCAT CTTACAGCTC AGAAAACAAG      60
CATGGTGAGA TAAGGAACTT TACTAAGGT CACATAACTA GTAAGTGGTG GAGCCAGCGT      120
TGAAACTCAG GAAGTCTGTA CACAAGTGGG AGGGAAGGCT AATATTTGAA ATGATAGACT      180
CAACATTCAA TATTTAGTA TCGATGAGCT CTAAGTTGAT AGAGCTATGT GTAAAAACCC      240
TGCATTTAAT ATTAAGAAAT CATTGGCAGA AGAGTAAGAG AGGGCTTTGG TCAAGTAAGC      300
TGAGTGCATA AGAAAAGTCT GGCATTTGAG GTGTCCTTAG CTCCAGATGC TTTGGTAGGG      360
CAGAGTGAT CCATGGAGGT ACCATGAGCT ACCATGGAGG TAGCTCAGAG AGGAAAGGGA      420
AACCTCGAG                                     429

```

## (2) INFORMATION FOR SEQ ID NO:1296:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1296:

```

CTCGAGCTGT TCTGTAAATA CCTGGTGCTA ACATCCCATG CCGCTCCCTC CTCACGATGC      60
ACCCACCGCC CTGAGGGGCC GTCCTAGGAA TGGATGTGGG GATGGTCGCT TTGTAATGTG      120

```

```

CTGGTTCTCT TTTTTCCTTC TTTCCCTCT ATGGCCCTTA AGACTTTCAT TTTGTTTCTA 180
ACCATGCTGG GCTAGCTAAA GGTGGGGAG AGGGAAGATG GGCCCCACCA CGCTCTCAAG 240
AGAACGCACC TGCAATAAAA CAGTCTTGTC GGCCAGCTGC CCAGGGGACG GCAGCTACAG 300
CAGCCTCTGC GTCCTGGTCC GCCAGCACCT CCCGCTTCTC CGTGGTGACT TGGCGCCGCT 360
TCCTCACATC TGTGCTCCAT GCCCTAGGC CTCTTGGCC GAATTC 406

```

## (2) INFORMATION FOR SEQ ID NO:1297:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 639 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1297:

```

GAATTCGGCC AAAGAGGCCT ACGCCCGCCA ACACGCCTGG GTAATTTTTT GTATTTTTAG 60
TAGAGACGGG GTTTCACCGT GTTAGCCAGG GTGGTCTTGA TCTCATGATC TCGTGATCCA 120
CCTGCCTCGG CCTCCCAAAG TGCTGCGATT ACAGGCAAGT GCCACCGCAC CCGGTGACAC 180
TGTTGCTCTT AAGCAGAAGC AAAATCAAAA GGCAGACAGG ACTCAAAGAA TGGTTCTAAA 240
CCTAAAAGTA CTAAGGCCTC TAGGAAGTAT GATGATGACA ATTACTGTGC AATTTATATC 300
ATGCTGAATT TTAGTAAAC CCCTGGCAAA CCACTCTCAC TTGGTGACAC TCCGTCCACA 360
GCACGGGGCC ACAGCATAGT GGATCAGTAC AACTTTCCTG GACAGCCTTG CTACCTGTAC 420
ACTCTTATGG ACTCAATTCC ACTTCAATGT ATTCGTTCTA GAGGTAAATG GACATGTGAA 480
CACAGATTCA CAGGCAAAGA TGTTTATATG CACCACTGTC TTGATGTTCA AGAAAATGGA 540
ACTGGTTACA TGCATGTGAT TAGCTATATA ATGTAAGTGT ATTCAGCCCC TAAAAAATGT 600
AGGCCTCTTT GGCCGATTGA ATTCTAGACC TGCCTCGAG 639

```

## (2) INFORMATION FOR SEQ ID NO:1298:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 606 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1298:

```

GCGATTGAAT TCTAGACCTG CCTCGAGTCC AACGGCATCG ACGTGTACCC CCAGAAGGAA 60
TTTGATGAGG ACTCGGAGGA CCGGCTGGTG AACGAGAAGT TCCGGGAGAT GATCCCATTT 120
GCTGTGGTGG GCAGTGACCA CGAGTACCAG GTCAACGGCA AGAGGATCCT TGGGAGGAAG 180
ACCAAGTGGG GTACCATCGA AGTTGAAAAC ACCACACACT GTGAGTTTGC CTACCTGCGG 240
GACCTTCTCA TCAGGACGCA CATGCAGAAC ATCAAGGACA TCACCAGCAG CATCCACTTC 300
GAGGCGTACC GTGTGAAGCG CCTCAACGAG GGCAGCAGCG CCATGGCCAA CGGCGTGGAG 360
GAGAAGGAGC CAGAAGCCCC GGAGATGTAG ACGCCACCCT GCCCACCCTT GGGATCCTGC 420
CCCCAAGTCA TTTCCGTCCC CCCCCAGGC CCTCCTCCCA CGGAGTGCCA AGACTGGCTG 480
AGGCCTAGCT CTCTAAAACG GTGGGGGAGG GGGGAGCGCC CTGAGAGAGG CATTCTACTA 540
ACCCACCCC AATCACCCCT ATTTTACTC TTTCTACTTT CGGAATTGGA AAGAACGACA 600
CTCGAG 606

```

## (2) INFORMATION FOR SEQ ID NO:1299:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1299:

GAATTCGGCC	AAAGAGGCCT	AGGAGTGATG	TTCATTTTGG	GATTTCAGG	GTGCATTGGA	60
GCGCTACGGG	AAAACACTTT	CCTTCTCAAG	TTTTTTTCTG	TGTTCTGGG	AATTATTTTC	120
TTCCTGGAGC	TCAGTCCCGG	AGTTCTAGCA	TTTGTTTTCA	AAGACTGGAT	CAAAGACCAG	180
CTGTATTTCT	TTATAAACAA	CAACATCAGA	GCATATCGGG	ATGACATTGA	TTGCAAAAC	240
CTCATAGACT	TCACCCAGGG	ACTCGAG				267

(2) INFORMATION FOR SEQ ID NO:1300:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 414 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1300:

GAATTCGGCC	AAAGAGGCCT	AGTGTTTTCC	AATCAAGTTA	ATAAATATCT	GTCTTCGTAC	60
CAGGAAAAAT	TCAATATTAT	TTTAAAGGAG	AAAAAATAAG	AATGTATTGG	TAAAATGCTT	120
TCTCTCACTT	CGAAATATCT	TAGTGAACAA	GAACACTGAC	ATAGAATTAA	AATTCTATGA	180
ACAGCCATAA	CCAAAGGAAT	CTCATTTAGT	GAATATTTAT	GTCCAGTAAC	TGCAACCCAC	240
ACTTAGAGCT	ATCCTTTTGC	TTAAAAACAA	AAATTTGGGC	CTTAAGAAGT	GATTAATATC	300
AGGCAAAAAT	AAATTATACT	TTTGTTTATT	TATTCAGGGC	CTTGCTCTGC	TGCCCAGGCT	360
GGACTGCACT	AGTGCAATCA	TAGCTCACTG	CATCCTTGAA	TTCCTGGGCT	CGAG	414

(2) INFORMATION FOR SEQ ID NO:1301:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 284 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1301:

GAATTCGGCC	AAAGAGGCCT	AGTGAAGTTT	ACTGTGATTC	TATGGAACAA	TTTGGACAAG	60
AAGAGTCTTT	AGACAGCTTT	ACGTCCAACA	ATGGACCATT	TCAGTATTAC	TTGGGTGGTC	120
ATTCCAGTCA	ACCCATGGAA	AATTCTGGAT	TTCGTGAAGA	TATTCAAGTA	CCTCCTGGAA	180
ATGGCAACAT	TGGGAATATG	CAGGTGGTTG	CAGTTGAAGG	AAAAGGTGAA	GTCAAGCATG	240
GAGGAGAAGA	TGGCAGGAAT	AACAGCGGAG	CACCACAAC	CGAG		284

(2) INFORMATION FOR SEQ ID NO:1302:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 193 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1302:

GAATTCGATT GAATTCTAGA CCTGCCTCGA GCCTGTGCGA GAAAAGTGAA CGCCAGTCTA	60
AAAAAAAAAA AAAAATCTAA AAGAAGCCAA AAATCCACTT GTAATGAGAT TCATAGACCC	120
CTTATTTATA CAACTCACAT ATTTGAATTT TTACATATTG AATTTTCTTT TAAAGGGGTG	180
GAGGGGTCTC GAG	193

## (2) INFORMATION FOR SEQ ID NO:1303:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1303:

GAATTCGGCC TTCATGGCCT AGGGATACAG CAACTATTTT ATCAATTGTT TGTATTTCCC	60
TTTAAGGTAA CATTTTAAAT GAAATGTATT ATATTTTAAAT CTATCCTTTT CCTTTGTTTT	120
TGTTCTTATT ATCTCTTCTG ATATATAACC AAAAAATGAA AAAATCTGTA CACTTGGTGT	180
TTGATTTACC TAAGCACCTA GTTAATTTAA TCTTTGTAAC ACTTTGGATG GTTAACCTAA	240
CCTTTACTCA AGTTGGTTTT TGTTTGTGTT AAAATGACTT ACTTGGTGGA ACCACTACTC	300
TCGAG	305

## (2) INFORMATION FOR SEQ ID NO:1304:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1304:

GCAGCGAGCA GTATACCAGC AGCAGCAAGC GAAAGGAAGA GTTTGCTGAT ATGTCAAAAG	60
TTCAATTCAGT GGGAAGCAAT GGGCTTCTGG ACTTTGATTC AGAATATCAG GAGCTCTGGG	120
ATTGGCTGAT TGACATGGAG TCCCTTGTGA TGGACAGCCA CGACCTGATG ATGTCAGAGG	180
AGCAGCAGCA GCATCTTTAC AAGCGATACA GTGTGGAAAT GTCCATCAGA CACCTGAAAA	240
AGACGGAGCT GCTTAGTAAG GTTGAAGCTT TGAAGAAAGG TGGCGTTTTA CTACCAAATG	300
ATCTCCTTGA AAAAGTGGAT TCAATTAATG AAAAAATGGGA ACTGCTTGGG GTATTTGCAT	360
TTTTATTACT GTTTGTAGGT TATGTGTACA TTTTGTGCGT AGTGAAGTCA CTCGAG	416

## (2) INFORMATION FOR SEQ ID NO:1305:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1305:

```

GAATTCGGCC TTCATGGCCT ACCAATGTCC TGCACATTGC CAGACTTCCA AACAGGTACA      60
AGTTCCCATC TGTTCTGCAA TAGATGAAAG CAAGTCACAG TTCCCAGGGC TACCAGTGTA      120
ATTTCTCAAG TGGCCAAGTT ACCTGGCTTC ATGGCTTGAC CTGCTGTGTT CTTTGGAAA      180
TGGAGAATGC CTGAGGGCTG TCTCTAACAG AAGGGTATGT GGCAGTATAT TACAGAATTT      240
ACAAGAAGCA AGGTGCAAAT GAATTACATT GAATTTTATT GTTAAGAAGA GATGATTTAA      300
AATTTGGTAT TTAACAACAT AAACGACTTT GGGGCCCAAC TCGAG                      345

```

## (2) INFORMATION FOR SEQ ID NO:1306:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1306:

```

GATTTCCTC AGCTTTTATT TGTTGAAAA ATTTTAAAT TCACCTTCTT TTTTGAAAGA      60
TTTTTACTGA TTATAGAATT CTAAGTAGTT TATTCTTCTA GGACTGTGAA CATATAATTC      120
TACTGTCTTC TGGCATTAT AGTTCTTTA TTTTATTTT TATTGAAAAA CATTMTTTT      180
GAGACATGGT CTCACTCAGA ATACTCGAG                      209

```

## (2) INFORMATION FOR SEQ ID NO:1307:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1307:

```

GAATTCGGCC TTCATGGCCT AAGCTTTTGC TTTTAAATA ACTTGATAG CTAAAACTT      60
GACGGTGAAA AGCTCTCAGA TCAAAGCTGA TCCTTCTGTC AGTAATGATT CTAAAAATAA      120
GCAAGATTTT AATGGGGAAT ATATTTTATT TCATTCTTAT CTCAAACCTA GGTACTGTGG      180
TCGTTTGGAG TTCATTTCGA GGCATTTTCA ATGTGCCTCA GGCCACATCC AACCTCTCCC      240
CAGAACTCGA G                      251

```

## (2) INFORMATION FOR SEQ ID NO:1308:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1308:

```

GAATTCGGCC TTCATGGCCT ACCTGACTCT TGAGATACTG ACTGGAAGAT AGACTGTTTT      60
GTTCCACCTG ATTGTATGGG AGAAATTTT GACCTTAGAA AGTGGAATG AGGTTGCTAT      120
GGAAACTGGT AATTCTGCTG CCACTCATAA ACTCTTCTGC AGGTGATGGT CTTTAAAGCC      180
GTCCTATTTT TACTCAGGAG CCACATGATG TCATTTTCC TTTGGATTTA TCAAAATCTG      240
AGGTCATCCT GAATTGTGCT GCTAACGGTT ACCCTTCGCC TCATTATAGG TGAAGCAAA      300

```

ATGGCACAGA ACTCGAG

317

## (2) INFORMATION FOR SEQ ID NO:1309:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1309:

```

GAATTCGGCC TTCATGGCCT ACACAGTATC ACTAAAAGAT TTTCATTCGG AAGATCACAT      60
TAGTAAAAAG ACTGAGGAAG TGGTTCTGAA AGATGGAAGA ATTGAAAGAC TAAAGTTAGA      120
GCTTGAAAGG AAAGATGCTG AAATCCAGAA GCTGAAAAAT GTAATCACTC AATGGGAGGC      180
AAAGTATAAG GAAGTAAAGG CAAGAAATGC ACAATTATTG AAAATGCTTC AGGAAGGTGA      240
AATGAAAGAT AAGGCAGAAA TACTTCTGCA AGTTGATGAA TCACAAAGTA TCAAGAATGA      300
GCTCACTATT CAGGTGACTT CACTTCATGC TGCATTAGAA CAAGAAAGAT CTAAAGTGAA      360
AGTATTACAA GCAGAGTTAG CCAAATACCA GGGTGGCAGA AAAGGGCTCG AG              412

```

## (2) INFORMATION FOR SEQ ID NO:1310:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1310:

```

CTCGAGTGTG GTGGTATGTG AATTATATCT CAGTAAAGCC ATCACAGGCG AGAAGAAAAA      60
GAGAAAAGAA AAAGAAAACC TTCGAGGAAG TCCAACAAAA AACATGAGGA AGAAAAGGTG      120
AGAGCCTGAG GATCCACACA GCAGGTACAG CAACTAACTG ACAGAAATTC TAGAGCCAGA      180
CAACAATGAC TAATCAAAC TAACTCAAAA CAAATGATTA GGCCATGAAG GCCGAATTC      239

```

## (2) INFORMATION FOR SEQ ID NO:1311:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1311:

```

GAATTCGGCC TTCATGGCCT ACAAGGAAGC ACAAGGAGAA AATTATGATG AAATGGAGCA      60
AAACAGGTAA GAGAGAGGGT CAGAGAAGTG AATGTGGGCC TTGATGCTGA AGCCATTGGA      120
GGGTTTTCTG TTGAGGAGGA GTATGGGAAT GATATGATCT GACTTATGTT TCAAAAAGTG      180
TACTCTAGCT GCTTTGTGGG AAATATNGGA GGGAGAGAGC AGAATCAAGG AGGCCATTTA      240
AAATGCCATT GCAAATATCC AAGAGAGGCG GACTCGAG                                278

```

## (2) INFORMATION FOR SEQ ID NO:1312:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 247 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1312:

```
GAATTCGGCT TCATGGCCTA ATCACATATG GTAGAGATTT TATACAGAAT TTAAAAATGT      60
GGCATTAATAA AAACCTTGTTT CATGGAAAAC TGCTTTCAGA GATTTTTAAT AAGTGTTTCT      120
CTCACATAGG AACCTAAGCT TCTCAGAGCT TTTAATAGGC TTCTAACAGG CTAATAGTCA      180
AGGCCGTGAC CCAAGAAGGG ATATAGTTCA CAGTGTTTTC CACAAATATT TCACCCCGAGA      240
GCTCGAG                                         247
```

(2) INFORMATION FOR SEQ ID NO:1313:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 311 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1313:

```
GAATTCGGCC TTCATGGCCT AGGGTCTTAG CTTTGGCTCT CCTTGCAAAG TTATTTCTAG      60
TTAATTCATT ATGCAGAAGG TATAGGGGTT AGTCCTTGCT ATATTATGCT TGTTTATAAT      120
TTTTTCATCTT TCCCTTGCGG TACTATATCT ATTGCGCCAG GTTTCCTCTG TCTCAAAAAA      180
AAAGAAGTTA CTTCCAAGAC AGACTTTTAA GATGTAACCA GCACAAAGCA ATGTCAGGGA      240
GGAGTGATAC ATGACAATAA ATGAGTCAGA TGAGCAAGAA GGCCCCAGAA CCCATGCCCC      300
CAGGACTCGA G                                         311
```

(2) INFORMATION FOR SEQ ID NO:1314:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 261 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1314:

```
GGGGAGCTGC AAACGCCCCG GATACTGTCA GAGATGGAGA AAGGTATGAC AGGAAGAGCA      60
GATCAAGAAG ACGGGAACAG CACGAGGCAC TGGGAGCTGC AAACGCCCCG GATACTGTCA      120
GAGATGGAGA AAGGTATGAC AGGAAGAGCA GATCAAGAAG ACGGGAACAG CACGAGGCAC      180
TGGGAGNTGC AAACGCCCCG GATACTGTCA GAGATGGAGA AAGGTATGAC AGGAAGAGCA      240
GATCAAGAAG ACGAACTCGA G                                         261
```

(2) INFORMATION FOR SEQ ID NO:1315:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 326 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double



(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1315:

CTCGACTTGC	ACGAGGAGTG	GCAGGATTAT	CTGCAGAGGG	ACCATTGGGA	CAGCTAGTAA	60
GGCCAGGTGC	TCTTTAGGCA	CCCCTTCTTC	CACCAGCTTC	AGGCCTGTCA	CAGCATCAGC	120
TGCTGAGAAG	CCAATCTTTG	ACGTTAGAAT	CAGAAGGCAA	AAGGCCAGAA	CTGCTGGCAT	180
TTTTATAATT	GAGAATAGCA	GCTTGTAACT	GTCTGTGATC	CCTTGGGTCT	CTTCTTTTAC	240
TATTGACGCT	TCTCTGTTTT	CTTTTTCAG	AAGGGCTACT	AATGTTGTTG	TTATTAAAAA	300
TACAGTAGGC	CTCTTTGGCC	GAATTC				326

(2) INFORMATION FOR SEQ ID NO:1316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1316:

GAATTCGGCC	TTCATGGCCT	AACGTCACTC	ACTGTCCTTC	TTAGTATCTA	ATTCTCCTTC	60
ACCTAATAGA	ACAGCAAATT	CTTTGAGTTT	AGGATCCTTA	ATGCAGTGTA	AATATTGCCT	120
TTTATCCTTC	TTCTCAGCTA	TGGTCTCAAT	TCAAATCATG	AGGACCATTG	TGGTGGCTCC	180
CGAATGGCCT	CACTGTTCCA	CTCCTTCCCC	ACTGCGCTAC	AGTCCATTCC	CCAGTGTCTC	240
CGAG						244

(2) INFORMATION FOR SEQ ID NO:1317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1317:

GAATTCGGCC	TTCATGGCCT	AGAAAGGTTT	GCCTGGTAAG	ACTGAACTGT	TCATAGTTCT	60
TTAAATAAGC	TACAATATTT	CCTAATTGTG	TACCCTTGAT	TTTACTGTTT	TCTTGCCCTA	120
GAATGCTGTT	TCTATCATTC	TTCATCGAG				149

(2) INFORMATION FOR SEQ ID NO:1318:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1318:

```

GAATTCGGCC TTCATGGCCT AGTCAGCAAA GCAAGGGGAG GCAGACCACA GGCCTCATGA      60
CTCTCACTGG AGTGCAATGG GACCCCCATG GGGTGAAAGC AGAGGAGTGA GCTGCTCTGA      120
TGTGAGCACT CACTCTGCTT GCCATATAGT GAGTAGACAG GAGAGACCAG GGCAGAAGTA      180
AGAAGACCCA TCAGAGGCTC CTCAGGAACC CGAGTGGGAG ATGGTGGTGG AACAGGGTTG      240
TAGTAGTGGC AGTAGTGAAG AAATGATCAG GTTTTGGAAA TATTTGGAAG GTCGAACTCG      300
AG                                          302

```

## (2) INFORMATION FOR SEQ ID NO:1319:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 219 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1319:

```

GAATTCGGCC TTCATGGCCT AAGAAAAAAA GAAAGAAAGA AAAAAGAAAG TACAAGTTTA      60
TAAAGTATTA TAGTGAAAAA TTCGCATTCT GGCTGATTTT AAGCCATTTA AAATTTATAT      120
AAAACAACCT TCCATAAAAA TTGACAGGT GCCCAGATGT TGCTTTCTCC ATTATTTTTT      180
TGTTTTTTTT TAATCACAGT GGTCTTGAGG CAGGTCGAG                                219

```

## (2) INFORMATION FOR SEQ ID NO:1320:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1320:

```

GAATTCGGCC TTCATGGCCT ACTGAGTTAG GTTTTATTAA TGCAGTTTTT ACAGATGAGG      60
CTACTGTGAC ACAGAGGGCA TAAACTTGTC AAAGACATGC AGCAAACAGG ACAGACAAAT      120
CTGAAGCCAG GTTGTCTAAG CTCAGAATCC ACACCTATAA CCGCTGTACC CCACTGCTTT      180
TGCCAGCAGG AGCTCACGTA CTTAGGACAG ACAATCAGTA CAGTGCTAGG CTCACTGAAG      240
GTGTTGAACA AATGTCTGTT CACTCTTTT GTTCTCAAAA GTACCAGGAA AGGCCAGAAG      300
AAAAAACTAC AAGACTTAGA AACTACAATG GATCAGATCA CTCAGTAGCA CCTCACTCGA      360
G                                          361

```

## (2) INFORMATION FOR SEQ ID NO:1321:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 66 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1321:

```

GAATTCAAAC GAAAGCCAGC TGAGAATACA GGAAACATGT TTCCAGCCAA ACCCAAACA      60
CTCGAG                                          66

```

## (2) INFORMATION FOR SEQ ID NO:1322:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1322:

```

GATTGAATTC TAGACCTGCA GCTACAGAAG TCAAGATTCC AAAACCAAGA GGCAGACCCA      60
AAATGGTAAA ACAGCCCTGT CCTTCAGAGA GTGACATCAT TACTGAAGAG GACAAAAGTA      120
AGAAAAAGGG GCAAGAGGAA AAACAACCTA AAAAGCAGCC TAAGAAGGAT GAAGAGGGCC      180
AGAAGGAAGA AGATAAGCCA AGAAAAGAGC CGGATAAAAA AGAGGGGAAG AAAGAAGTTG      240
AATCAAAAAG GAAAAATTTA GCTAAACAG GGGTTACTTC AACCTCCGAT TCTGAAGAAG      300
AAGGAGACGA TCTCGAG                                     317

```

## (2) INFORMATION FOR SEQ ID NO:1323:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 106 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1323:

```

GAATTCGGCC TTCATGGCCT ACTGTAAGGA GGAGATGAAA GAATTAGTAG AAAAGGTTTT      60
AAAAACAGTT ATTATACTA TATTCCATAT GCTGAAGGCG CTCGAG                      106

```

## (2) INFORMATION FOR SEQ ID NO:1324:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1324:

```

GAATTCGGCC TTCATGGCCT ACTCCTTTAT TTCCTTTGTC TGTAGAATAA AGTCTTAGAA      60
TAATATTCCT GTTAAGGCCC TGCTTATCCC AATACCGTAT CCATACTGAA CTTTCAGTTC      120
TTTATATGCA CTCTACTCTC TGTCTTTCAG ATTTTTCGAG GTATTCCTTT AGAACACTCT      180
TTCTCTTCCA TCTTATCGCC TACTCTTTGG GTTCTGTGTT AAACATTACA TTTCTCGGTG      240
GGGGGGCTTA TCTCGAG                                     257

```

## (2) INFORMATION FOR SEQ ID NO:1325:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 78 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1325:

```
CTCGAGACCG CAAGCACTTC CCACCTCATC CTTATTTCTT CTATCCCTTT TCATTGTTTT 60
TTTCTCCTTT TTAAATTC 78
```

(2) INFORMATION FOR SEQ ID NO:1326:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1326:

```
GAATTCGGCC TTCATGGCCT AGAATTGTCC TCTGTGGAAG GGACTTTCTT TTGGCCCTAG 60
GCCCCCTTCCT GCCCCGTGTCG TCAGCAGAGA GATGGAAAAC TTGATGACTA GCTCCACCCT 120
ACCGCCCCCTT TTTGCAGATG AAGACGGTTC CAAGGAGAGT AATGATCTGG CTACCACTGG 180
GTTAAATCAC CCAGAGGTTC CATACAGTAG TGGCGCCACA TCATCCACCA ACAATCCAGA 240
ATTTGTGGAG GATCTCTCTC AAGGTCAGTT GCTTCAGAGT GAGTCTCAA ATGCAGCAGA 300
AGGCACCTCG AG 312
```

(2) INFORMATION FOR SEQ ID NO:1327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1327:

```
GCGATTGATT CTAGACCTGC CTCTCCTTCA AGCATTGCAG CAAACAATTG TACTGTGAAT 60
ACGTCATCAA TTGCAACGTC TTCAATGAAG GGTCTTACGA CTACAGGAAA CTCGTCTCTT 120
AATAGCACAT CTAACACTAA AGTATCAGCA GTGCCTACAA ATATGGCTGC CAAGAAAACA 180
TCTACCCCCA AAATAAATTT TGTGTTGGT AATAAGCTGC AGTCAACAGG AAATAAAGCA 240
GAAGACACAA AAGGAACCGA ATGTGTTAAA AGTACTCCTG TCACTTCTGC TGTGCAGATT 300
CCTGAAGTAA AGCAAGACAC AGTGTGAGAA CCAGTCACAC CTGCATCTCT TGCTGCTTTA 360
CAGAGTGATG TGCAGCCAGT GGGCCATGAT TATGTGGAAG GGATACTCGA G 411
```

(2) INFORMATION FOR SEQ ID NO:1328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1328:

```

GAATTCGGCC TTCATGGCCT ACTTTTTCCT TGGTCAGATC ACAATGCTCC TATAAATGTT      60
TCACATAACA TGCTTACTTG TGGGTATACC CTCCTTATCT CCTCAGGGGC TAATTTTGGG      120
AAGGGACTAC TGCCTTACT TTAAAGTTAA ATATAAACTA AATTCCTTCC CTAGTTAGCT      180
CAGCCTACGT GCAGAGATAA GCAAAAGTAG TTAACCTAAA AGATATCACC CTTTGGGGGG      240
TGTCAGAGGC AAAATAGAGT CAGTCATGCT AAGCTCCCCT CTCGAG                      286

```

## (2) INFORMATION FOR SEQ ID NO:1329:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1329:

```

GAATTCGGCC TTCATGGCCT AGGGGGATTG AAGATTTTTT GTAGGTGGAA GGCCTGAAGT      60
GCGACTAGAG GGCAATAAAT TCAAGGTGGG AGACTGTCTG CTGATGTTCA TTCCACTGGG      120
CTGTTTATGG ACTGGGCTGT TAGTGCTGGA GTGGCTACCC TGGGCAACTA GTGCATTTGG      180
ACTGGAACTA CTTGGGGATA CAGTAGGCTT GGGAGTTGGG TTGGATTTAG AAATAAGTTT      240
AGTTGATACT GAAGGCTTAG CTGACAGAGA GGGCTTGGGT GAGGCAGAAG GCTTAGGCGA      300
GGGCAGGGGT TTAGGAGATG TGGCAGGTCT AGAATTCGAG                      340

```

## (2) INFORMATION FOR SEQ ID NO:1330:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1330:

```

GAATTAAAGA GGGCGATATC ATCACACTCA CTAACCAAAT TGATGAGAAC TGGTATGAGG      60
GGATGCTGCA TGGCCATTCA GGCTTCTTCC CCATCAATTA TGTGGAAATT CTGGTTGCCC      120
TGCCCCATTA GGATGTTATG CTGGCTGGCT CGCCTCCTCT TGACCCAGAT AGTTACGGTT      180
AACCCTGCT TTGGCAATGC TGCTTATAAC ACATCCCAAG TGCAGGCCGC AGTGGTCCAC      240
GTCATCCAGC CCCACCAAGT GACTTTGGTT GACTTGTGGG CTCCCACAGG ACTCGAG      297

```

## (2) INFORMATION FOR SEQ ID NO:1331:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1331:

```

CTCGAGTCCG CTGAGCTGAG AAGCACTGCG ACTTTTCCGT GACAGACCAA CGATAGCTAC      60
CATTTTGGCA CCAAGGCTAG AGCGCCGCTT TTTGCCACTG GTGCCCAAGG TGCCCACTGC      120
AGTGTGAGAC TGGCTGCCAT CATTCTTCTC CAGTGAGCAC ATGCTCCAC TGATGCTGGT      180
GCTTTTTGTC ATGTTCTTCC CTGATATGCC CATTTGTCTG CTTTGCATT TGGATGTAAA      240

```

GACACTGTCA GCCGATGGAT CATTAAAAGT GAGGACAAGA GTAAAAAGGA AAAGACAGAA 300  
AATGCATTTT AGATAAAACA TTTGGAGTAT AATTTAGGCC ATGAAGGCCG AATTC 355

(2) INFORMATION FOR SEQ ID NO:1332:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 438 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1332:

GAATTCGGCC TTCATGTGCG GTGAAGGTCC TGTGATTGTA CAGTTAGCAC ATTTTATATG 60  
ACAGTATAAT CTAAAAAAT AACATAGAAA CAGAAACATT AGAAACGTAA GTCACAGTTT 120  
GTGAGTATGT CATTTTTITAG GGAAAAATAA AATATAGTAA CGATTTATGA GGCCCCAAAG 180  
TTTTATATAA AAATGAAAAA GCTGTTTGCC AGTTAGGACT GACTGTAGCC TTCTGTCAAA 240  
TCAGTCTTGA CAACTGTAA AAGACATTAT CATCACAAAT AGGGCTGCAT TTCACTCTGT 300  
CTGTCAAATA CAATCAATAT ATATGACTTT AAGAAAGTGT GACCATTTTC CCAGAGTGAC 360  
ACCAACAAGA TGGTGAATA GGAATTTTGG TTTAACTTTA CTCACCTCAC AGAAATCCAA 420  
CTAGCAACTA ACCTCGAG 438

(2) INFORMATION FOR SEQ ID NO:1333:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 309 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1333:

GAATTCTAGC CCCACCCACT TTCTCAGACA TCCCCACCGG AGGATCCCAT CAGTCACAAT 60  
CCTCACTAAT TAGACCATTG AAATCCCCA AAATAAAAAA AGGGAAAGAG GTATAGACTT 120  
ATCTTAAGGG TCTTAAGTTC TGGCATTITT CTATTTAATA ATATATATTG CTATAAAATG 180  
GAATTACTAC CAAAATTTAG AAAATCTTTT AGCAGAAGAT ACAGCCCTAA TCTTACCACT 240  
CCAGTACAAT CATTATTGAC ATTTATGATG TACTTCGTGA TAGTATCAAA ACAATTCAG 300  
TATGTGAAC 309

(2) INFORMATION FOR SEQ ID NO:1334:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 243 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1334:

GCGATTGAAT TCTAGACCTG CCTCGAGCTG CCGTGTTTTT CATTTTAATT GTGTGACATA 60  
AAATGTAAAA TGTACCCTCT AAACCATTTT TTAGTGTCCA GTTTTGTGGT ATTAAGTACA 120  
TTCACATTAT TGTGCAACCG TCCCCACCAT CCATTACAG AACTCTTTCA ACTTGCAAAA 180  
CTGAAACTGT ATGCATTAAG CAATAACTAT CCCTTCCTTC TTCTCTCTC CCCAGAGCTC 240

GAG

243

## (2) INFORMATION FOR SEQ ID NO:1335:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 280 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1335:

GAATTCGGCC	TTCATGGCCT	AATTCTGGGA	AACTGAGAG	AAAAATCTGA	GGCCATCCAG	60
AAGGAAC TAG	AACAGACCAA	GCAAAAAACA	ATCAGTGCGG	TTGGTGAGCA	GCTCCTGCCC	120
ACAGTCGAGC	ACCTCCAGCT	GGAGCTGGAT	CAGCTAAAGT	CAGAGCTGTC	CAGCTGGCGA	180
CACGTGAAGA	CCGGCTGTGA	GACAGTGGAT	GCCGTACAAG	AAAGAGTGGA	CGTGCAAGTC	240
AGAGAAATGG	TGAAACTCCT	GTTTCCGAA	ATAGCTCGAG			280

## (2) INFORMATION FOR SEQ ID NO:1336:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 281 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1336:

GAATTCGGCC	TTCATGGCCT	ATAGGCCATG	AAGGCCGAAT	TCGGCCTTCA	TGGCCTAGAC	60
TAATCTTACT	GTAGAAATGA	TGTGAGATTC	TTGTTGACT	ATTTTAGAGC	AGATTCGGTA	120
TCTAATGGGA	TTCCATCTTG	ATGTACAGAG	CACCTTCTAC	ATAATGAATT	TTGCATTTC	180
GATGGATGAA	GCCTTTAACA	CAGACAGAAT	TTTAAGTATT	GCATATTTCT	GGAAGAAAAG	240
CATTGATCAC	ATCCTCCTTA	GATATTTAGT	AATACCTCGA	G		281

## (2) INFORMATION FOR SEQ ID NO:1337:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 172 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1337:

GAATTCGGCC	TTCATGGCCT	AATATTTAGG	TAAAAAGGTA	AACTAGTACA	CCTACCAGAA	60
AAGATAAATA	TTAATTTATT	GCATCTCTGA	CATGAGAAAA	AAAGCCTTTA	TGTTTTACTG	120
TTTTTTTCTA	ATTTTCTTT	TTCTTTTTTT	TTTTCACATG	AATGTTCTCG	AG	172

## (2) INFORMATION FOR SEQ ID NO:1338:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 235 base pairs
  - (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1338:

GAATTCGGCC TTCATGGCCT ACTGTATTTC ATAGTGAAGT GTTCATAAAC TAAAGAGTCA	60
TTGATTGTTT TTCCTGGCTA ATTAAAATCT GAATTCCATT TGAAGTTCCA TTGAAATCAT	120
GGTTTACTC TATAGCAGTG GATGTTTTT CCCAACCTTT CTGATATTTT TTCCTTCCT	180
GAGACAGGGT CTTGCTCTGT CACCTGGGAT GGAGTGTAGT TGCACCAAAC TCGAG	235

(2) INFORMATION FOR SEQ ID NO:1339:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 148 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1339:

GAATTCGGCC TTCATGGCCT ACTTGTTTTT AAAGGCATAT GTTGTTTTAT TGTGCTTCAC	60
AGGTACTGTA TCTTTTTTTA CAAATCTAAG TTTTGTGGCA ACTCTGTGTC AAGCAAGGCT	120
ATTGGCCCCA TTTTCCCAAC AAGCACGC	148

(2) INFORMATION FOR SEQ ID NO:1340:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 257 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1340:

GCCTGTGTGA AGTTTGGACT TTAATCTACC AGATCACTCC TTCACCCTCC ATAAAGATGT	60
CTGAACCTGA CACTTCCTCA GGATTTTCGG GAAGTGTGGA GAATGGAAC TTTCTTGAGC	120
TGTTTCCAC ATCCCTGTCC ACGTCAGTGG ACCCATCCTC AGGCCACCTG TCAAACGTCT	180
ACATCTATGT GTCCATATTC CTCAGCCTTT TAGCGTTTCT GCTTCTGCTT TTAATCATTG	240
CCCCCAGAG GCTCGAG	257

(2) INFORMATION FOR SEQ ID NO:1341:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 259 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1341:



GAATTCGGCC TTCATGGCCT ACTATAAAGT ACTCTCGCTG GTATTGTCAG TATGTGTGTT	60
AACAACAATA CTTGGTTGTA TATTTGGGTT GAAACCAAGC TGTGCCAAAG AAGTTAAAAG	120
TTGCAAAGGT CGCTGTTTCG AGAGAACATT TGGGAACGTG CGCTGTGATG CTGCCGTGTG	180
TGAGCTTGGA AACTGCTGTT TAGATTACCA GGAGACGTGC ATAGAACCAG AACATATATG	240
GACTTGCACC AACTCGAG	259

## (2) INFORMATION FOR SEQ ID NO:1342:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1342:

GAATTCGGCC TTCATGGCCT AGTCCTTGAC TCTGGAGTTT TACAAAGCAG TCACATTTC	60
AATAAAAGTC TGGGAAAGCA ACACATCATC GCCAACTTTT AATTTTGCTA AATAAGGATA	120
TTAGAAAAAG AATAGAAAAT TGCAGTCCCT TACTGTTTAA AGAAAAACCA AAAGAAGTTA	180
AAAAAAAAC AACCTCATTG TGTTGTCTTT GTTTTTGTTT TGTTTTCTTT CCTTGAAAT	240
CAGTGAAAGT TTGGTCAGCC ACCTCGAG	268

## (2) INFORMATION FOR SEQ ID NO:1343:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1343:

GAATTCGGCC TTCATGGCCT AGCCATTTAA TATACTAAAA CAGTGTTGTA AATTAACTTT	60
GGTACAAATT GCCAGTCATC TCTAGATCAT TTTAAGCATT TTAAGAATAT TTATTATCAA	120
TCTAAGTACA GAAGAATAAC TGCCAGCAGT GATTATTTGC TTTGGATTAG AGTTTTTAA	180
AATCCACCTC ACTGAAATGG TTATGTTTAT CACAGTTTGC AAGGTTTGTG TGTTTCTCGA	240
G	241

## (2) INFORMATION FOR SEQ ID NO:1344:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1344:

GAATTCGGCC TTCATGGCCT ACCCATTCCT TCCTTCCTGC CTGGCCTGGG CCCCTCCTGC	60
ACAGATGGCC TAGGTACCCA GCCTGGAGGC CAAGGCTGGA TTCCCAGAGT CTGCCCTGGT	120
GGAGTGGGAA TAGCAGGTTT TCTGCAACTC AGGGGAGCTG CCCTGCAGGG CTTCCACAT	180
GTGCTCAGGC CCCTGTGCCA GGTCTGGTGA TGCTTCCTCC TTGCCTTTCA GGATCTCCTA	240
TTGCACAGCA GACAAGATGC ACGACAAGGT GTTTCATAC ATCGCCAGG GCCAGCACAA	300

CCAGAGCCTC GAG

313

## (2) INFORMATION FOR SEQ ID NO:1345:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1345:

```
GAATTCGGCC TTCATGGCCT AGGCTTCTCT TCTGAATTGA TTGGTAGTGT TGTTATTTTC      60
TTGTTATTCA GTTTAACAAG TACATAATCA ACATCAGTGC TTGGGAAGTC AGGAGTACGA      120
GAGATAAATA AGAAGTATAT GATCTTTTCT CTTATTTTCT CTCAGTATAA GTTGGACCTG      180
TTTTTCCCTT CATCTCTTTT TCTTCAAGAA CATAATATCG GCTGAAGTGG AATGAGTATT      240
CAAATTGTCC AAAAAAATAT ACAAGTGAGG GAATTAATAA AATTTTTTGT AATTATAAAT      300
ATGTATATAT TGGGGGGCAG TCTCGAG                                         327
```

## (2) INFORMATION FOR SEQ ID NO:1346:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 189 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1346:

```
GAATTCGGCC TCATGGCCTA AATCCTTGA AATACAATGA GACTCATCAG AAACATTTAC      60
ATATTTTGTA GTATAGTTAT GACAGCAGAG GGTGATGCTC CAGAGCTGCC AGAAGAAAGG      120
GAACTGATGA CCAACTGCTC CAACATGTCT CTAAGAAAGG TTCCCGCAGA CTTGACCCCA      180
ACACTCGAG                                         189
```

## (2) INFORMATION FOR SEQ ID NO:1347:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1347:

```
GAATTCGGCC TTCATGGCCT AGTGGGCTTC AGGAAAGCAA AATATAAATA TTATGGTTAA      60
AGAATTATA ATTAAGATTT CACCCATAAT TCTTAATACT GTGTTGACAA TCATGGCTGC      120
ATTGTCTCCA AAAACAAAAG AAGATGGATC CAAAGATACG TCTAAGGAAA TGGAAAATCT      180
TTGGGGTATC AAATCGATTA ATGATTATAA CACTTGGTTT CTTGGTGTG ACACGGCAAC      240
AGAAATAACG GAAAAGCTCG AG                                         262
```

## (2) INFORMATION FOR SEQ ID NO:1348:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 333 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1348:

GAATTCGGCC	TTCATGGCCT	AGTAATGTTA	AAACAAACGA	AATAAAAATA	GAAGGAAAAA	60
CTTTCTGAGT	TTCAAAAACA	ACAGACTAGT	ACTCTAAAGA	ACTCTTTAAA	ACAATTAACT	120
GTTAGGATTG	CAGTTATGAT	TGGATATTAT	TTAATTCTGT	TTCTGATGTG	GGGTTCTCTC	180
ACTGTGTTCT	GTGTGCTATT	AATATTTACC	ATTGCAGAAG	CTTCATTGAG	TGTTGAAAAT	240
GAATGCTTAG	TGGATCTGTG	CCTCTTATGC	ATATGTTACA	AATTATCTGG	AGTTCCTAAT	300
CAATGCAGAG	TTCCCCTCCC	CTCCGCGCTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:1349:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 553 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1349:

GAATTCGGCC	TTCATGGCCT	AGGAAGACAG	ATTTACACAGA	GAGTGGGTTT	CATGTTAAAT	60
GTCTGATTTT	CTTGTCGGAT	GCCCCACAA	GGACACTAGG	TTTTGTGGGC	CAATGTGTTA	120
TGTGTGTATG	TAGGCAAGCA	GGAGGGGGTG	GGTGGGCTTC	TTTTTTTTTC	TATTTTTTTC	180
TTTTCTTTTT	TGTTGTGGA	AGAACCACGT	TAACCCCTCT	AATTTCTTTA	AAAAGACATA	240
AGGTTTGAAA	AGGAGATTTT	AGGAAGAAGC	AAAAGAAAAA	AAATGGGATA	CATATATTGC	300
ATCTGTAATC	CAATCAAGCT	GTCACGTGAAG	ACAAACTTGA	TCTCTGTTCT	CACCAGTTGA	360
CACACTCATC	AGGCTATAGG	TCAACTCTAA	GTGTGGTGAC	AGGTGATGGA	CTCTATGCCA	420
ATTCTGATAC	TGAATTTTCT	TTTGCTTATT	GAAGCTTCAT	TTTGTGTGTT	TTAATTATGA	480
AAGTATAGTA	ACACCTACCA	TGCATACCAA	AGCAATATCA	ATATTTTCAA	ATGCATCTTC	540
CCCCATTCTC	GAG					553

(2) INFORMATION FOR SEQ ID NO:1350:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 246 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1350:

GAATTCGGCC	TTCATGGCCT	AGGTTTTTGT	TGTTTGTGTTT	TAAAGGAGTT	AGACATAGCC	60
TAACAAACTG	GAAATTGACA	TTTCCATCTA	TTTTTCTCCC	TTTGAAGCT	AAATATGTCT	120
TTGTTATTTT	GGTTCCTAGT	CCCCATTACT	ACTTATTTTC	TGATAGTTCA	TCCACAGCAA	180
CTTCAGTCAG	TTAGCTCACT	AGTTCCTTATG	GCTAGAGATT	CCGCCAGTTT	TCCCCTAAAA	240
CTCGAG						246

(2) INFORMATION FOR SEQ ID NO:1351:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1351:

```

AAAGAAAAAA TAAAAA AAAAAGGTGTA TGTCAGACAC ACAAGAAAAG      60
CAAATCAGTG TTGTAAGCTT AAAGTACAAT TTCAAAGGTC ATTACCAACA GCAGGGTTTT      120
TTTTATACTT TAAAAACATT ATGCTACATA TCATTGCCAT TTTCATATTT TGGGGTTTTG      180
CTACTCTTAT ACAATGGAAT CAATGGAAAT GTCATCCAGC CAGATCTCGA G          231

```

## (2) INFORMATION FOR SEQ ID NO:1352:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1352:

```

TGAATTCTAG ACCTGCCTCG AGTTGCTCCC AGGAATAGTC CAAAGGAGCT GCTCTGCCC      60
CTTTATACAC AAGCGCCAGC AACCAAAACC CTCCCTCCTG GCAATAAGGC CTCACTATAG      120
TTGCCCTCAT GCTTCCTAAG CTCTCTCTTG CTCTAATAAC TCTAATTCTG GGCCAAGCCC      180
AAGAGTGCCA TTCTTTCTTC CTAGCTGGGG ATGGAAAGCT GAGAGGGGCA CAAGGAGGGC      240
AAAAGTATCA CCCTATCGAG                                     260

```

## (2) INFORMATION FOR SEQ ID NO:1353:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1353:

```

GAATTCGCCT TCATGGCCTA CTTTTCAAGT GAATGATTGG GTGTTTGAAC CTTCTTGATT      60
ACCTTAAGAG GGAAAAATGA AGGAGAGGAG GGAACCATCA TCACATACCT TTACAGTTGT      120
GGAATGTTAG CCCACTATAG TGTTTAACTA AGGAAAATCT AATATAATAC ACTCCCAAGT      180
GATCTGAAAT GATCCGCTAT TCAGAATTCC AGAGAAAGAC ATATCCCTGC CAGAAGGGTG      240
TCCTTCATAA CCAAATTTGG TCTTCAGTCT GGTCGGTGCA TACTCAAACA GGAATCACTT      300
CCCTTAAGGA ACCTAAGGTA TGCAGTTGAG ATCAACTTAT TCCTTTTGA TTTGTCCCCT      360
TAAAGCATCA ATCAGACGTG AATGCATCTT GTGACTTGGA GTTACTAGTA ATATTGAAAT      420
CTGAAACTTG GGGGATCTTT GAAGACACAT GGGATTAAAA GCTGCATAAT ATACATCTCG      480
AG                                     482

```

## (2) INFORMATION FOR SEQ ID NO:1354:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs

(B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1354:

GAATTCGGCC	TTCATGGCCT	AATACCCAAA	ATTGGCATGA	CTACTTATAA	AATAGTGCCT	60
CCCAAATCCT	TGGAAATATC	GAAAGACTGG	CAATCAGAAA	CCATAGAGTA	TAAAGATGAT	120
CAGGACATGC	ATGCTTTAGG	GAAAAAGCAC	ACTCATGAGA	ATGTGAAAGA	AACTGCCATC	180
CAAAACAGAAG	ATTCTGCTAT	TTCTGAAAGC	CCAGAAGAGC	CACTGCCAAA	CCTTAAACCG	240
AAGCCTAACC	TGAGAACAGA	GCATCAAGTG	CCCAGTTCTG	TGAGCTCACC	TGATGATGCC	300
ATGGTTAGTC	CTCTGAAACC	TGCTCCCAAA	AATCTCGAG			339

(2) INFORMATION FOR SEQ ID NO:1355:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 203 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1355:

GAATTCGGCC	TTCATGGCCT	ACTTTTAGAT	GCTTTACATG	CATAAATTCA	AATAATACAT	60
TAATAACCTT	CCATACATCT	TTCTTTGTGT	ACACGTTACT	ATTTCTGTAA	GATAGATTTC	120
TAAAAGTGGA	ATTCTAGGC	CAAATGATTT	ACACTTTTTT	TGTTTGTTTG	TTTTTTTGTT	180
TTTTTGAGAC	GGAGTGTCTC	GAG				203

(2) INFORMATION FOR SEQ ID NO:1356:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 516 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1356:

GAATTCGGCC	TTCATGGCCT	AGGAGAATCA	GGCAGGGAGG	TTGCAGTGAG	CCGAGATGGC	60
AGCAGTACAG	TCTAGCTTCG	GCTCGGCATC	AGAGGGAGAC	CGTGGAAAGA	GAGGGAGAGG	120
GAGACCGTGG	GGAGAAGGAG	AANGAGGGGG	AGGGGGAGGG	GGGGAGAGGG	AGAGGGACAA	180
TGATGTCTTG	CTGTAGGTAT	TCTTCCCCAT	TTGAATTTTT	TCCTCAGCAT	TATTTTTTTT	240
AACATCATTC	AGTCTCCTCT	TATACTACAC	TTGGATTGAA	TTTAATATCT	CATGAAGAAA	300
AAACATTTCT	ACTTTGAAGC	ATGTGAATTA	GCATGTTTTT	ATAACAGCTT	TATTGAGATA	360
TAATTTACAT	ATATAAATAA	ACCGTTTAAA	GTGTATAAAT	CAGTGGTTTT	TAATGAGATA	420
TAATTTACAT	ATATAAATCA	ACCATTTAAA	GTGTATAAAT	CAGTGGTTTT	TAAAATATTC	480
ACAATGTTGT	ACGACCGTCT	TCTCAGTCAA	CTCGAG			516

(2) INFORMATION FOR SEQ ID NO:1357:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 405 base pairs  
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1357:

GAATTACTAA	TCAAGAAAAA	ACAAAATCAC	AAATCACTAC	CAAAGCAGTT	CATTGTCAAT	60
AATTTTTTTC	CCTTGATTTT	TTGTTTACTT	TTTGCGAACC	CTGAGCATAC	ATCCAAGTTG	120
CCCTAAATAT	ACGCACACCT	GAGGTTGTCT	TTATAGGAGC	TTTATGGTTG	CAAGTTTTGT	180
GTATAATCTT	TAATCATTTT	GAGTTGATTA	TTGTGTATCT	AGTACCATAA	GAGTCCTGTA	240
TTATTCTTTT	GCATATGGAT	ATCTAGTTT	GGAAATCTTC	CCCGTTGTGT	CATTTTGGTG	300
GTGTTTTGAA	AAATGTGTTC	ATTCCATATA	AATTTTTGTT	TATTATCGAG	CACATTCATT	360
TTGCTCACTG	GTCTGTGTTT	CTCTGTGTAC	GCCAGTAACC	TCGAG		405

(2) INFORMATION FOR SEQ ID NO:1358:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 328 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1358:

CTCGAGTCTG	GCTTTGTTTC	AAAATGATTA	AGATTAAATG	ATGAAATAAT	ATTTTATAGC	60
CACTGCATTG	GATACTTGA	TTGTTTTTCA	AGCATCTTCT	TATGACTAAA	TCTTCTGTTT	120
CATTCTGTTT	TAAATCTAAA	AAGTAAATG	ATGGTCACTT	GGAATCTGCT	CTATATTTTA	180
ATTATAGTCT	CTTCTGTTTA	TAAACAATAA	CTTACACATA	TTTTTCATAG	TTTTAAGTAA	240
AGATTAAATA	ATGCCATCTT	AGAAAGGATC	TGTTTAACTT	ATATTATAAA	AGTTAGATAC	300
ACAATTTTAG	GCCATGAAGG	CCGAATTC				328

(2) INFORMATION FOR SEQ ID NO:1359:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 250 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1359:

CTCGATGGCC	TAAGGCAGTC	TCCTGGAAGC	ATGACATTGA	TGCCCTGGGC	TCACCTCTTT	60
GTTTTGTTTT	CCTTCCACTT	TAGCGGGAAC	CACATCTTCA	AGGGCCGTGC	TGCCGGCATA	120
GCACTGAATG	AGAACGGCAA	AGGCCTCATC	ACAGGTACGG	ATGGGAACTG	CCTGGCACCT	180
GGCAGCCAGG	CCAAGTCCC	CTGGCGTCAC	CCCCCAGCTT	CAGGACCTCT	AGGCCATGAA	240
GGCCGAATTC						250

(2) INFORMATION FOR SEQ ID NO:1360:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 206 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1360:

GAATTCGGCC	TTCATGGCCT	ACGATTCTAT	TTCCTTATCT	GCTTGCAGAG	CTATTTAAGA	60
ATCAATGTCT	TATTTTTCCT	GAGTCCTTTA	TAACCCTATT	CATATTTTCA	ATTGCTGATG	120
CCTCTTTGAG	CTACGAGTTC	TACTTTGTGC	ATAACGTTGA	GGAATTTCTA	CGTTTACTGT	180
TTCTCCTTAC	TCACTCATC	CTCGAG				206

(2) INFORMATION FOR SEQ ID NO:1361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1361:

GAATTCGGCC	TTCATGGCCT	AAGAAATCAA	CGTTGAACCC	TAATGCTAAG	GAGTTCAATC	60
CTACAAAGCC	TCTGCTGTCT	GTGGTGAGCT	GGGACAGGAG	AATGTGGACT	TTGGTTTCTG	120
TGGGGAGACT	TGGGCAGTGC	TTATAGATGA	ATAGGGGGAG	GAACACTTCA	CTTCCAGGAC	180
CACCTGCCTG	GCAGGCAGTG	TGAGGAGATG	TCATAAAAAT	GTAAGGATGG	CACCTTTGGG	240
GCTGGCTTGG	GGAAAATGGA	CTCAGGTCTC	TAGGTTTGGG	TGATCAGGGA	TCCCAGTGAG	300
TCTGATGAGG	GGTTAACAGG	CTTTTCTTTG	GTTCTTGGCA	TTGGCTGAG	GGAGTATTGG	360
AGTGGGGATA	GCTCGAG					377

(2) INFORMATION FOR SEQ ID NO:1362:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1362:

GAATTCGGCC	TTCATGGCCT	AGTTAAAGGC	AAGTATGTCA	TATTACTGAG	GCTACAAGTT	60
AGTCAGCAGA	TGAGTGCCAG	TCCAGCCTTT	TCTGGTATGT	TATTGTTAGA	AATATTGAGT	120
TCTAATGTTA	CATCTGAGGA	AGTATGTAAT	TTGAGAATTG	TAACTTCTAA	GGGATTCACT	180
GCATCATAGC	TATGCCTGTA	TGGAGTCTAA	CATATGACCA	ATACCAACCC	ATAATCCAGC	240
ATTGAATTCT	AGACCTGCCT	CGAG				264

(2) INFORMATION FOR SEQ ID NO:1363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1363:

```

GAATTCGGCC TTCATGGCCT ACCCCTCCCC TAGTTCAGT CCAGGTAAAC AAAAATTGAT      60
TCTATTTTTT CAAAACACCA GCCCCTTCAG ATGGCCTGGT TAATCTTCAT TAACATGTTA     120
TCTTCATTAA CATGTTTATC TTCATTAACA TATTTCTCAG TGATAAGAAG GGCCCAGGGT     180
TCAACATCCC ACTTTGCATC CATGCAGACA AGGGCTGTGG GAAGCTGTAA AACTGAAGAG     240
GCGGTGAATC CAGGAGGGAT TCCCCAGATA TCCGTGAGTT GGTGTTTGAC TTTCTTGAAC     300
ACGTCTTTCC TTTACTTTAC ACTTCCACTC GAG                                     333

```

## (2) INFORMATION FOR SEQ ID NO:1364:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1364:

```

CTCAGGGGGT CATGTTGTG GGGAGAAAGA GACCACATCA CACACAGAGA GAACAAGTCT      60
GTATTAGTTG CTTTGTCTAC ATAACAAACC ACTCCAAAAT TTAGTGGTTT AGAACAATCA     120
CCTATTTAGT TAATGATTCT CTGGGTGCA ACTTGGTCTG GGATCAGCTG GGCAGTTCTT     180
TTGCTGGTCT CAGCTGGGTT CAGCTGCCTA TCAGCTAGGG AGCTCTGTTT CAGAGGTTGG     240
TTGGCTATGG GTGGCAGGGA TCAAGGATGA CGGAGCCATG TGTCTCTTTT CCCTTTATTA     300
CCCAGCAGGT TAGCCCAGAT CTTTTCCTTT TCTTTCCTAG GCCATGAAGG CCGAATTC      358

```

## (2) INFORMATION FOR SEQ ID NO:1365:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1365:

```

GAATTCGGCC TTCATGGCCT ACTTGTTTCAG GGTATGGGGC TAGGATGAGA GAGAATNCCA      60
CAGAGTATGA AGGAAGAGTG ATAGATCCAG ATGAGATACA GTCAGAGTG CCACGCCCCC     120
AGAAAGAGGA ATCAGGCAAG TACTGTCCCA AGGCAGCTGG AGGGTGAGGG CTGAGTGCCC     180
TGGCTTCCTC ACTTGGGGAG ACCATGGGTC TCTGTAGAAA TTCCAATATA AAGGCAGGGA     240
AATTTGACTG CATGGAGTCT TCAGGTAGAA ATGTTTCTCT TGCCTAAATT CA              292

```

## (2) INFORMATION FOR SEQ ID NO:1366:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1366:

```

GAATTGAGCA AGATACCTGG GTCATGATCT CTGAACAGGG TGAGAACTT TATAAAATGA      60
TGTGCAGACA AGGAAATCTG ATCAAAGACA GAAAAGAAA ACTGACTACG TTCCCTAAAT     120
GCTTTCTTGG AAGCGAATTT GTGTCATGGC TGTTGGAAAT TGGAGAGATT CACAGGCCTG     180

```



AGGAAGGCGT GCACTTGGGA CAAGCATTAT TAGAAAATGG AATCATTCAC CATGTTACTG	240
ATAAACATCA ATTCAAACCA GAACAGATGT TATATAGATT TCGCTATGAT GATGGAACAT	300
TTTATCCAAG AAATGAGATG CAGGACGTTC TCGAG	335

## (2) INFORMATION FOR SEQ ID NO:1367:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1367:

GAATTCGGCC TTCATGGCCT ACTTTCTCTG TTTGCCTTGA CCTTTCTTTT TCATGTTAAA	60
GCCTTTCCTC AAATGTCTGA TTACCCTTGG CTGCCCCGTC TTTAAGAAAG CGCCACTAGT	120
CAGCTCATCG GAAGCTGTGA GGGAGAGGGC TGCAATTTGGT CTGCCCAGGT GGAGGAACAC	180
TCAGGCATCA GTACTAGGAG GTCTTTCCTC TCAGCCCATT GGATTTCCCT AGAGTCCTAC	240
ACGGCTGGGA TGAGGCACCT GGGTGCTGAG TAGAGGAAGG GAGTCATGGG TCAGTCACCC	300
TGTATGCAGA TTTTCACACA ACCCCCTCTC TCCAGGACAC GCCTCGCCCC CCACCCTAAG	360
TAATGCAGAA CCCAAATCTC GAG	383

## (2) INFORMATION FOR SEQ ID NO:1368:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1368:

GAATTCCTTAT GTGACTGCGA TGGATCTCTT TGTTTCTGTT TGTTTCATTT TTGTTTTTGC	60
AGCCTTGATG GAATATGGAA CCTTGCAATTA TTTTACCAGC AACCAAAAAG GAAAGACTGC	120
TACTAAAGAC AGAAAGCTAA AAAATAAAGC CTCGATGACT CCTGGTCTCC ATCCTGGATC	180
CACTCTGATT CCAATGAATA ATATTCTGT GCCGCAAGAA GATGATTATG GGTATCAGTG	240
TTTGAGGGC AAAGATTGTG CCAGCTTCTT CTGTGCTTT GAAGACTGCA GAACAGGATC	300
TTGAGGGGAA GGAAGGATAC ACATACGCAT TGCCAAACTG ACTCGAG	347

## (2) INFORMATION FOR SEQ ID-NO:1369:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1369:

GAATTCGGCC TTCATGGCCT ACCATTTTCT ATGAGCAGAG GAGAGTCACA GGGCATCATG	60
TGTTAGGAGA AAGAGGCTGG ACTTTATCTT GTCAGTAATG CTGGATGATA CAATAAGGGT	120
AGGGCCTCAA AAAGTAAATG TAAAAATGAT ATTTGGCACA CATTGGGGTG AATAGAGGCT	180
GGAGAAAGGG AACCAAGTCA CTATGTATTG GAATAATTCA AGTATAGGCC TGGGATACTC	240

GAG

243

## (2) INFORMATION FOR SEQ ID NO:1370:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1370:

GAATTCGGCC TTCATGGCCT AGAGGATTAC TTATTTCTCA GCATTCATCT GGTAACCTAA	60
GCAGCATGAA GCAAGAGTTG CACTTTAAAA AATGACAAGA AAATAGCTAT TCATTTAGTC	120
GACAGAGTAA GGCCCATCTC ATTTCCAGGA TCACTAGTTT CTGCTTATGA CGGGGTGAGC	180
ATCCGCCAGC GCGGTGATTG GGAGGCGCCC CTGTGTCTTT AGGCTGAGGC AGTGCCCAT	240
GCTGCAGTGC CTCGAG	256

## (2) INFORMATION FOR SEQ ID NO:1371:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1371:

GAATTCGGCC TTCATGGCCT AGTGTAGCAA GCTTCCCCTT TGGGAGGGAT GTGAGAACAG	60
AAGACTGAGG ATTGTCTCTA ACTCTAGGAT TCTTTGATGA TTGATTGGAT TGGGGTTTTG	120
TGTTGTGTCT AATATTACGG ATGCTAAAAT GCCTGTACTT CCAAGGTGAT AGCCACCAAT	180
AACCATACAC GTACTAGTCA TCCTAGAAGT GTTTTTATTT CTTCTGTTGG TTATCTTCCC	240
TACCCCTAGG GTTGGTGTCT GTTTCCTGCT ACTTCAGGTT GGTTCCCAC TGGGAGGCTT	300
CTGCTGACAG AAAGCCCCAT GCTTTGCTCG AG	332

## (2) INFORMATION FOR SEQ ID NO:1372:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1372:

CTCGAGGGCA ACTGCAGAAG AAAAGATCAG TGAATCTGAT GACATAGCAG AAGAACTAT	60
CTAAAGCGAA GAAGACAGGA AAAAAAGCCC CAATGTGAAA TGAACAGATC ACCAGTGAGC	120
TGTGGAACAA CCTATATGGG TTATAGGAGA CCCTAAATGA GAGAACAAGG GACTAAAAGA	180
AGGATTTAAA GAAATAATAG TACAATTTTC TCCAAGTTTC ATGAAAACCG ATTGAATTCT	240
AGACCTGCCT CGAGGCAGGT CTAGAATTCA ATCGC	275

## (2) INFORMATION FOR SEQ ID NO:1373:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1373:

```

GAATTCGGCC TTCATGGCCT ACAAGACCAT CCTGGCCAAC ATGGTGAAAC CCTGTCTCTA      60
CTAAAAAATA CAAAAAATT AGCCAGGCAT GGCAGCGTGT GCCTGTAGTC CCAGCTACTC      120
AGAAGGCTGA GGCAGGAGAC TTGCTTGAAC CCAGGAGGCA GAGGCTGCAG TGAGCCGAGA      180
TCGCGCCATT GCACTCCAGC CCGGGCGACT GAAGAGACTC CATCTCAAAA AAAAAAAAAA      240
AAAAAGATGA GCCTTTTCTG GGAAAGTGGA AAAGACAGAG AAGCCTCCTG ACAGCCAAGG      300
AGACCAGCAG CCAGTAGAGC AGGTGTTGTA ACAAGGCCGA GGCCCTCGAG                    350

```

## (2) INFORMATION FOR SEQ ID NO:1374:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1374:

```

GGAAAAATCA AGGAGACATA TTACCACCAA AAGAACAATA ATTCCTAGA AGCTGCAAAT      60
AAATAGAGAC TATACACTGC CTTACAGATA ATTTAAAGTA ATTGTTTAA GGAATCTCAG      120
TGAACCTCAA GAAAATACAG AGAATCAGTT CTATGAAATC AGGGAAACAA TAAATCAACA      180
AAACGATAAA TTTAACAGGT TGAAATCACT AAAAGAACCA AACAAATTTT GGGCTAAAG      240
AATACAATGA ATGAAATGAA AAATACTCTC GAG                                    273

```

## (2) INFORMATION FOR SEQ ID NO:1375:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1375:

```

TGTGGACTAA AAAAGATGCT GGGAAAAAAG TTGTTCATG TAGACATGAC TGGCATCAGA      60
CTGGAGGTGA AGTTACCATT TCAGTATATG CTAAAACTC ACTTCCAGAA CTTAGCCGAG      120
TAGAAGCAAA TAGCACATTG TTAAATGTGC ATATTGTATT TGAAGGAGAG AAGGAATTG      180
ATCAAAATGT GAAATTATGG GGTGTGATTG ATGTAAAGCG AAGTTATGTA ACTATGACTG      240
CAACAAAGAT TGAAATCACT ATGAGAAAAG CTGAACCGAT GCAGTGGGCA AGCCTTGAAC      300
TGCCTGCAGC TAAAAGCAG GAAAACTCG AG                                    332

```

## (2) INFORMATION FOR SEQ ID NO:1376:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1376:

```
GAATTCGGCC TTCATGGCCT AGGCTTCAGC AGCTTCCTAC GATCAGCCGA AGAAAGCAGA    60
AGCTCTGGAG GCTGCCATCG AGAACCTCAA TGAAGCCAAG AACTATTTTG CAAAGGTTGA    120
CTGCAAAGAG CGCATCAGGG ACGTCGTTTA CTTCCAGGCC AGACTCTACC ATACCCTGGG    180
GAAGACCCAG GAGAGGAACC GGTGTGCGAT GCTCTTCCGG CAGCTGCATC AGGAGCTGCC    240
CTCTCATGGG GTACCCTTGA TAAACCATCT CTAGAGAGGA CATCCCTGCT GGGCTGCTGT    300
GCAGAGTATA AGATTTTGA CTTGTTTCATG TCCCCTCTCA CCCCTCGAG    349
```

(2) INFORMATION FOR SEQ ID NO:1377:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 437 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1377:

```
GAATTCGGCC TTCATGGCCT AAATATGTTG AAATAGGTTA GAAAAGGAGG TGAATATTAT    60
GGGCTGTTGT CATTTGTAAA TTCTGCAGTA ACTTCAGCGT TGAGGGTTTT TTTTGTTTTT    120
GTTTTGTGTT TGAGTTTTGC TTAAGGAAAT CAAAGAGTTG TTAAGTCTGC TGTGGGTGTT    180
TAAGAGACAG GATCTCACTC TGCTGCCAGG GCTGGAGTGC AGTGCAGCCA CGAATGCCTG    240
GGCTCCAGGC CCTCCTGAGT AGCTAGGACT TACAGGCATG CACCACCACA CCGATTTTTT    300
TATTTTITTA TTTTATTTTT TTTTAGTTTT TAGAGGTGGT GGGGGGGTCT CACTGTGTCT    360
GCTTCTGGGC TCAAATGATC CTCCTGCCTC AACCTCCCAA AGTTCTAGAA TTACAGAGGT    420
GAGTCACCAC ACTCGAG    437
```

(2) INFORMATION FOR SEQ ID NO:1378:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 267 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1378:

```
GAATTAAAGC ACTGCCTCTA TTCAGGCTGC CGAGGCACTG CTTTAATTTT TTGAAAGATT    60
CACCGCGTCT TCTTGGATTT CAAGAAAAAT CCCGTTAAGA ATTGAGGGGC TCTCTTCTTC    120
CCCTCCTGAC GTGAGTGTA CCACTTCCTT GGTATGTCTC CTTTCCTTTT GGCCTACATC    180
CTTTGTCTGT TAGGTGCTTC CACATCCTTA TGTCTTAAAT GGCCAAAATA CGTCACCCCC    240
ACTGCCAAAA CAAACAGATC ACTCGAG    267
```

(2) INFORMATION FOR SEQ ID NO:1379:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 305 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1379:

```
GAATTCGGCC TTCATGGCCT AGAGGTGACT AGAAGCGAAG ATGGAGGTGG CGCAGCACCT    60
CATCCCAACT CATGCCACCT GGGGAAGCAG CTTCAGGCCT TTCTGTTGTA ACCTCAGCAG    120
AAACTTTGGG GTTTATCCTT TATCTGCAC ATGCCCCAGG GAGGTAAAGG GACTTGCCTA    180
GGTTCATGTA CAAACTTTCT GCTTCCAGAG CAGGACTTTA TTGGGACACC ATAAGGTTGA    240
GGCTGGGAGG TACCCAAGAA TTCCTGGGGA TGGTATGTCA TTGACTGTGG GTAGAGGGGC    300
TCGAG                                         305
```

(2) INFORMATION FOR SEQ ID NO:1380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 206 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1380:

```
GAATTCGGCC TTCATGGCCT AGGCTTGTT GCCTCTGAAA GGAGGGAAAG TCTCTTGGTA    60
AATTATCTCT TTTGTGCTGT TTGCTGTTT TCTGTACCG TCTTTCAGT TCTCCTCTCA    120
CTGGTTGCAG GCTTTCATAG TAAGGTTTGG CGAGAAATGT TCCAAACATC ACATTTTGA    180
TTCTAGGCTG TCACCCAGG CTCGAG                                         206
```

(2) INFORMATION FOR SEQ ID NO:1381:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1381:

```
GAATTCGGCC TTCATGGCCT ACTCCTCGAT GCTGATTCAT ATCCTACTGC CCATGGTTTT    60
CTGCGTCTTG CTCATCATGG TCATGTGCTA CTTGAAAAGT CAGTGGATCA AGGAGACCTG    120
TTATCCTGAC ATCCCTGACC CTTACAAGAG CAGCATCCTG TCATTAATAA AATTCAAGGA    180
GAACCCCTAC CTAATAATAA TGAATGTCAG TGACTGTATC CCAGATGCTA TTGAAGTTGT    240
AAGCAAGCCA GAAGGGACAA AGATACAGTT CCTAGGCACT AGGAAGTCAC TCACAGAAAC    300
CGAGTTGACT AAGCCTAACT ACCTTTATCT CCTTCCAACA GAAAAGAATC ACTCTGGCCC    360
TGGCCCTGAC ATCTGTTTTG AGAACTTGAC CTATAACCAG GCAGCTTCTG ACTCTGGCTC    420
TTGTGGCCAT GTTCCAGTAT CCCCAAAAGC CCCAAGTATG CTGGGACTAA TGACCTCACC    480
TGAAAATGTA CTCGAG                                         496
```

(2) INFORMATION FOR SEQ ID NO:1382:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1382:

GAAACTAGAC	AAGAAATCTC	AAGCCATGGA	GGAGCTAAAA	GCAGAGCGAG	AAAAACGAAA	60
GAACAGAAC	GCTGAGCTCC	TTGCCAAAA	ACAGCCATTA	AAAACCACTG	AGGTCTACTC	120
TGATGATGAA	GAGGAGGAAG	AGGATGACAA	ATCCAGTGAA	AAGTCAGACC	GCTCATCAGC	180
AACATCATCG	TCTGATGAAG	AAGAGGAGAA	AGAAGAGATC	CCTCCCAAAT	CCCAACCAGT	240
TTCCTTACCT	GAAGAATTGA	ATCGGGTTCG	ATCTCTCGAG			280

(2) INFORMATION FOR SEQ ID NO:1383:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1383:

GAATTCTAGA	CCTGCCTCAG	TCTCCCCGTC	ATGCTCCCTC	TGCCCCGCCC	TCAAAAAAAA	60
AAAAAAAAAA	AAAAAAAAAC	ACAGCACCTG	TCCAGGCTTC	CTTAGGTACA	TCTTCTTTGT	120
ATCCATTGGG	AGGCTCTGAG	ACTGGCCCCA	CTTGGTCCTA	AGAATCCCAA	GGTCTTTGGG	180
AGCGTCCAGC	ATGTTAATTA	GCGTATCATT	ACATACTGCT	ATCCCTTTCC	ATTTCTTTTT	240
GTTCCATCAC	TCTCCTCTCG	AG				262

(2) INFORMATION FOR SEQ ID NO:1384:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1384:

GAATTTCGGCC	TTCATGGCCT	ACAGATTATC	TTACACTGAA	CTGATCAAGT	ACTTTGAAAA	60
TGACTTCGAA	ATTTATCTTG	GTGTCCTTCA	TACTTGCTGC	ACTGAGTCTT	TCAACCACCT	120
TTTCTCTCCA	ACCAGACCAG	CAAAAGGTTC	TACTAGTTTC	TTTTGATGGA	TTCCGTTGGG	180
ATTACTTATA	TAAAGTTCCA	ACGCCCCATT	TTCATTATAT	TATGAAATAT	GGTGTTCACG	240
TGAAGCAAGT	TACTAATGTT	TTTATTACAA	AAACCTACCC	TAACCATTAT	ACTTTGGTAA	300
CTGGCCTCTT	TGCAGAGAAT	CATGGGATTG	TTGCAAATGA	TATGTTTGAT	CCTATTCGGA	360
ACAAATCTTT	CTCCTTGGAT	CACATGAATA	TTTATGATTC	CAAGTTTGGG	GAAGAAGCGA	420
CACCAATATG	GATCACAAAC	CAGATGGCAG	GACTCGAG			458

(2) INFORMATION FOR SEQ ID NO:1385:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1385:

```

GAATTCGGCC TTCATGGCCT AAGTTTTCAT AATCTTTCTA AGCAAATAAA TTGAGCATGC      60
AGGTTTTTTT TGCTTTCAGT AAGTATGTGA AAGATATTTA TTGTACTTTG GTTTTCTTTT      120
CTTTTTTTTT TTTTTTTTTT TTTGAGACTG AGTCTCTGTC ACCCAGGGTG GAGGGCAGTG      180
GCCCAACCTC AGCTCACTGC AACCTCCGCC TCCCATGTTC CAGTGATTCT CCTGCCTCAG      240
TCTCCCGAGT AGCTGGGATT ACAGGTGTGA GCCACCACGC CCAG                        284

```

## (2) INFORMATION FOR SEQ ID NO:1386:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1386:

```

GAATTCGGCC TTCATGGCCT AGTAGTTGTT CCATGCTGTT GTTTTTTGTT TTATCTTTCA      60
TTGCCTTTCC CTCTGCAGTC AACATTATGA CCTGGGGACT CCAGCATCCT TCAAGCAAGC      120
CATTTCGGAA GAAGGTGAAA AGAAGCCAGG ATGATTGGCA CCTCCTCCTC CTCCTCCTCT      180
TCTTCCTCTT CCCTTGCCCA GCCCCTCCT GTGCGTGTGT TTCAGACAAC ACAGGAGCCA      240
GCACAGGAGT GGAAATCCT GTAGCGCAAC TCGAG                        275

```

## (2) INFORMATION FOR SEQ ID NO:1387:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1387:

```

GAATTCGGCT TCATGGCCTA ATTGAATTCT AGACCTGCCT CGAGCCTCCA AAAAGAGTAA      60
ATAAATAAAA ATAAATTCG CTTTAAACAG AAACACACAT AAAACAAAGT TATATATTGA      120
ACCTAACCCCT GTATTCCTC TGGGAACAGT GGTTCAGTAT TCAATAATTC AGGATTGCA      180
GCAGCATAGA ACTTAATGTA ATGAGAGTCA AGTATATATT TCCAGAACCT CTAAACTAC      240
TGCATATGTG AACATATCTT ATTCATTGAT TATGTGGGCA TATAGTGAAA CTCGAG      296

```

## (2) INFORMATION FOR SEQ ID NO:1388:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1388:

```

GAATTCGGCC TTCATGGCCT ACAACTTGTT CTAGCTTGTT ATCCCTCAAA GTTGGGTCAT      60
ACGTTAGTGC TAGATACTAG AAATTTTCAC TTTTCCACTG ATCAGAGAGA CAGACATTAA      120

```

```

AAACAAAAAT AGAAGAAAGG AAAGCTTTCA CCCTGCAGCT TCTTAGCAGG GAACAATTGT      180
CTTGCCAAAA CTTTTTTCCC TTTTCTCTCC CATTTTCTTT TACCCAATCC CTTCTTACTC      240
CTTGCCAGTG TGACCATGCG CATTTGGTTT AAAAGATATT CTTTCCTAAT CAGGGCAAGA      300
CAGGCAAGAA TTTTAAAAAA GGAAGGGAGG GAGGGAAGAA GGAAGGAAA ATAAATCCTT      360
TATTTTTTTA AACCTATTTG AACCTCTTA AGAAAATTC ACAATAATCA GGATTTCTGT      420
AAATATTGTC AATATATATG AACATATTTG AAAAACTACA GTTACAGTAT ATTACATTT      480
TTGGAAACTT TTCTTCAGGG CCAAGTAACA TGTTGTATCT TCCTTTTTCG TTGTGGGGGC      540
TACTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1389:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1389:

```

GAATTCGGCC TTCATGGCCT AATATGTTCT TCACAGGGAT GAGTCCTAAA TATTTATCTT      60
CAGCCATGAC ATTTTCTTGG AATTCCAGAT TTGCATATCC AACTGCCAAC TTGATATCTC      120
ACTTGGAAGA ACATCATCAC AAACCTAACT CATCTGAAGT TGGCTTCACA TTCTCCTCCC      180
CTATCACTAA CTGCCTTTCC CACAGTATTC CCCATTTCCG TACATGGTAC CACCATTTAT      240
CCAGTTGTTC AGACCTAAAC CCTTCTAATT ATTCTTTTTC CTATCGTTAT CCCACATACC      300
TCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1390:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1390:

```

GAATTCGGCC TTCATGGCCT ACTGGGTAT TATCTATTC CGTTGATCTA GCTAGTTTAA      60
AATTTTCTAC CTTTCTACC TGTTTTGTG TAATAGTTTA CTGTTTTTAT CTGAACAAAA      120
TTCCTCTTTC AATAGTTGAT CTGCTGAAT GTCTCCCGT AGCATTGGGC TTCCTCAGGT      180
AACCTGGCAT TTTGGTTTGA ATAGAAGGT TTTTATTGTC CTTTTTTTCT TTTTATTATT      240
TGAGATATTT ATCTTTTCTT TATTTATTTA TTCGAGTCGG AGTCTACTCG AG

```

## (2) INFORMATION FOR SEQ ID NO:1391:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1391:

```

GAATTCGGCC TTCATGGCCT AGGCGATCGT ATTAATTCTC AAGAAATTTT CAACAAATAC      60

```



CACCTGGTTA ATGTTTTTCAT TAAGGGCACA CATTCTTGCT ATTGAGCCAA TGTTGTTGGT	120
GATGGTGATC AAAGTCGCTC TGGCCAGGTC CTCTTTACTG ACAGCCTCTC GCTTCTCCTT	180
GCTCATCATG TTTCCAAAGC TTGAAGCCAC ACTCGAG	217

## (2) INFORMATION FOR SEQ ID NO:1392:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1392:

CGGGAGGCTG AGGCAGGAGA ATCACTTGAA CCCGGGGGGT GGAGATTGCA GTGAGCCGAG	60
ATCAAGACAT TGCATTCCAG CCTGGGCAAG AAGAGGGAAG TTCTGTCTCT AAGAAAAAAA	120
AAAAAAAAAA AAAGCTACAC TTTGATCTTT GATTCACTAG ATATCAGTAA GTATTTGCTG	180
CATTTTCATGA GAGCCAACCA TGAGTAAGAC AGAAGTACTT CCTGTCCTCC TGGGCTTTCC	240
TGAGTAGCAG GAGAGATGGA CTAGGAAGAT GAGTGACTGC AGTAGCCTGT GCTGTTCTGC	300
GGTGATGGGA GAGGCCACTG AGAGTCCGGA CAGGCAGGCT GATATTGTGA GAAGGCTTCT	360
GGAAAGAAGG AACATTTAAG CTGAGAGTGA GAGTTGCGTA AGAATTTCCT AGGGAGGGGA	420
AAGAGGGAAA CACTCGAG	438

## (2) INFORMATION FOR SEQ ID NO:1393:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1393:

GAATTCGGCC TTCATGGCCT AAAACTTCCT AGGAGAAGGC AAGAGAAAGC CACCAGACCA	60
GAGCCGAGGA CTAAACTTTA AGGTCGAAGA CGGCAGAGGG GCAGGTTCTC CCCTGCACAC	120
CCCAAGGCCT CTCCTGCACC CGCGAGGCCT TCCTTGAGCG CCCAGGCCCC CGAAATGCCT	180
GCCCTCCTTC TGACAAAAGG AGGGGGTAGG ATGTGAAGGG GTAGTGCAAC CAACAATGTT	240
TTTGTAACA CAACAACAAG GAAATACTCG AG	272

## (2) INFORMATION FOR SEQ ID NO:1394:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1394:

GTGAAATTGT CAAATAAAAA TATGAAAAC CAGCTGACAA GAGTAAATGT CCTTAAAGAC	60
AAAACAATTG AAGAGCTCAG GCAATCTTTA GCAAATGTTG AAAGGATGAA AGAGAAGGCA	120
AATGTTGAAA CGATGAAAGA GAAGGCAGTT GTGAAAACAG AAAACTTGAA AACTACATTA	180
GACTCTGCAG AGCAAAAGGC AAGATCAGAC AAAGAGAAGA CCCAGCAGAT GTTAGATGCT	240

GTCATTCTG AGCCCCAAC AGCAAAGAGC GCACCTGAAG AAGTATCAGG ACAAGAACAA 300  
GAAGTACTCG A 311

## (2) INFORMATION FOR SEQ ID NO:1395:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1395:

GAATTCGGCC TTCATGGCCT ACTGTGTGCT TAGTTTTAAA GACAACTTTG AAGTAAACAA 60  
TGAAATAAAA GATGTCTACTA AAACCTCTGA GGCTCCTGAG CACATTTTGC TGATACAGTC 120  
TGTGGGGCTT GAGGAGACCG CATGTATTGT TCTTCTTTT GTTTTTCTTC TGAGTTCTCA 180  
ACTGCGGAGA GCACCTGAAC CCCCTTTTCT TTTTGACCGC AGGCTGCACT TTGGGCCCCA 240  
GCCAGCCCTT TTTCTTTTTC TTTTCTTTT GTGGTTCTTC CCTGGAGCGA CTCTGGGGAG 300  
TCCTGGATAT CCCGCTGCC CTTCCCCTC AGCCCCATGC TTGTTCCAAC AGTCTCCACA 360  
GCTCGAG 367

## (2) INFORMATION FOR SEQ ID NO:1396:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1396:

GAATTCGGCC TTCATGGCCT ACTTGGAAC GAAAGAGGGC CCAACCTACA ACTAAGAAGG 60  
GACAAACCTT GAACTAAGTA AGACCTTACA CACCCAGAAA GAACACTGGG CCCTCCTTCT 120  
TCAGGGACAA TGCAGTAGCC ACTTGGCTTG TGGAATTTAC TGAAGGCTAT TTCCTGTAAC 180  
TTGCTAGTTA ACTTAGTTTT GTATTTCAGG CAGAGGTGCG CTCTGTAATG TTGGGCCTTT 240  
GACTTCACAG TACTGGAGAG CTGTTACAC AGATGTTTAG ACCTTTCTCT CTCTCTCTCT 300  
TTTCTTCTTT CTCAACAACT CTTATCTCTC GAG 333

## (2) INFORMATION FOR SEQ ID NO:1397:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1397:

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCGAGAT ACAGCAGCTG CTGCAGAACG 60  
TCAAGTCTGA GTTGGAGATG GCCCAGGAAG ACCTGTCCAT GACCCAGAAG GATAAATTTA 120  
TGCTCCAGGC AAAAGTGTCTG GAGCTGAAGA ACAACATGAA GACCCTGCTC CAGCAGAACC 180  
AGCAGCTCAA GCTGGACCTA CGCCGCGGCG CGGCCAAGAC GAGAAAGGAG CCGAAAGGCG 240  
AGGCCAGCTC TTCCAACCCT GCCACGCCCA TCAAGATCCC GGACTGCCCA GTTCCCGCCT 300

CGCTGCTGGA GGAGCTGCTG AGACCACCGC CCGCCGTGAG CAAGAGCCCC CTCGAG

356

(2) INFORMATION FOR SEQ ID NO:1398:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 447 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1398:

GAATTCGGCC	TTCATGGCCT	AATTCTATGA	GGTATTATTA	TCACTATTTT	ACAGATGAGT	60
AAACTAAGGC	TCACAGAGAT	TAAGTGGCAG	AACTGAAATT	CTCCATATCT	TTTGATTCC	120
AGATTTATTC	TCTTAATCAT	GATATGATTT	TGTCTCATAT	AATCCAATAC	AATAAATAAG	180
GAGGTCAGGC	AGTAGGAGGT	GAAGTTGGAG	AGACTGGGAG	ACCTATCAGG	AGGGGTCATT	240
TATGCCTGGC	TAGGAGTTTG	GACTTTATGC	TGAGGCTATG	GGAGCACTAT	TAAAGTGATT	300
CTAGCACTGC	AAAGTTATGA	TTAGGTTTAT	CAGCCAAAGG	AAAAAAAAAG	ATCTTGGTGG	360
TCACAGTGCA	GGTAGATACG	ACATAATCGA	GAAATGTGAA	GAATGCAGAA	TCAAGAGTTT	420
GGTGCTGGAC	AGAGAGAGGA	ACTCGAG				447

(2) INFORMATION FOR SEQ ID NO:1399:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 428 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1399:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACTCTTT	TAAATTTTCT	GCATTTGCCT	60
GAAAAGCACC	CCTGTAAGAA	TAGATTTCTC	ATGGCTCTAA	AAATTATTCC	CAAGAATACC	120
TTACTTGGTT	CAAAAGCAGA	CTGTTTCTCT	TCATTTCATC	TCAAATCAGA	CTTCTGGGCA	180
AGATGTTCTT	TAGAGTAAGC	AAACCTACAA	CCTAAAAATC	TCTTCAAGAG	GCATCTCTGG	240
TCTTGTGACA	AGACCTCTTC	AAAAACCCAC	AGTAAACTC	CCCTCCCTCC	AGTTGGCCAC	300
CAGTCTGCCA	CCAAACATGA	ACAAATTCTG	CTGCTAATCG	GTTTCCCTTG	TGATCTGGTT	360
CCTGAGGTCT	TCGGATCTGT	GCAATGAATT	ATTTATTGTT	TTATTAAACC	GACAGTGGTG	420
TGCTCGAG						428

(2) INFORMATION FOR SEQ ID NO:1400:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1400:

GAATTCGGCC	TTCATGGCCT	ACTAGACCTG	CCTCAGGGTG	TTCTGTGGTT	TCAGGTGGAA	60
GGTGGAGGGC	CTCGGAGACC	AACTGTGAGT	TAGCGGGGGT	TTAGAATCTG	ATGGGAAGAG	120
GGCAGAGACA	ACAGGTTCTG	AAGAGTCAGG	GCTCCTGGGA	CCTGGGAAGT	AAAGAGTAAA	180

CCTGGGGCAG TGGGTCAGGC CAGTAGTTAC ACTCTTAGGT CACTGTAGTC TGTGTAACCT 240  
TCACTGCATC CTTGCCCCAT TCAGCCCGGC CTCGAG 276

(2) INFORMATION FOR SEQ ID NO:1401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1401:

GAATTCGGCC TTCATGGCCT AGCCACCGTG CCTGACCTAC TTATTCTTTT TCCTGTTTCAG 60  
CATCTAGTGT ATGATACGAT TTGCTTATTT GTTTATGTTT CATCATCTGT TCCCCACCCT 120  
CAGCCCTGGC CCCCTTGCTG GAACGCAAGC TCCAGGCAAA GCTATTTTCAC CGTTGCTGTT 180  
TTCCAAGGGC CTCGAACAGT GCCCGGCACA TAGCAAATCC TCAGTGAACA TTAGAGGAAT 240  
AAGTGATTCA AGAATAGAGC TGTTAGAAGG TGTTCTGGAG GAAGACGCAT CCGGCTTCAT 300  
CCCTGGCACC ATCGAG 316

(2) INFORMATION FOR SEQ ID NO:1402:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1402:

GAATTCGGCC TTCATGGCCT AAATTCTCCA GCAAATGAG GATGAAAACC AGGAAAGAAG 60  
AAGAAATGGG ATCCATAAAA CAGTGGACCT TACTTAGGAT GTCTCATTCT AGAGTGACAG 120  
CCAAAAGGGT ATCTCACCCT AGAGTGACAG CTATCCAGCA GACTAATTTT AGATGAGAGC 180  
ATACTGTCTC GGGCTTTTCTG GGAAGAATGT GCATTCAGTG CCATAGATAG TATCACTGAA 240  
GAGCTGGGAT GCTTGAGAAG ATTATTTAGT CAAGAAAAAA GAAAGACAAA TCAACAATAT 300  
GTCAAAAAAT TCAGGTCCAA TTATAGAGCA AAAGGGCTCG AG 342

(2) INFORMATION FOR SEQ ID NO:1403:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1403:

GAATTCGGCC TTCATGGCCT AAGGCTAAAA AGAAGGAAAA AGAAAAGGAA AAAAAGGAGG 60  
AGGAGAAAAAT GGAAGTGAT GAGGCAGAGA AAAAGGAGGA AAAAGAGAAG AAAAAGAAGC 120  
CTGAGCCAAA CTTCCAGTTA TTGGATAACC CAGCCCGAGT TATGCCTGCC CAGCTTAAGG 180  
TCCTAACCAT GCCGGAGACC TGTAATACC AGCCTTTCAA ACCACTCTCT ATTGGAGGCA 240  
TCATCATTCT GAAGGATACC AGTGAAGACA TTGAGGAGCT GGTGGAACCT GTGGCAGCAC 300  
ATGGCCCAAA AATCGAGGGG GAGGTAACCT GAG 333

## (2) INFORMATION FOR SEQ ID NO:1404:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1404:

```

GGGCCCTGGG CCCAGCCCC CAGCCCATCC GTGGCCAGG CACTGGGGGG CTGAGGTCCT      60
CTGAGAAGGG ACACAGGGCC GGGGGGCTCT CTCAGCCCAT CAGCAGGAGA GGACTGACTC      120
CAGAAAAATC AGCGTTTGTG CCCACTCAGG CTGCCAAGAC CTGTGTCCGT CCTTCCAAGC      180
TCAACCTTCA GAGTTCATGA GGCCCTTGC CCAGAATGTC CACAGAGTTC ATGAGGCCCC      240
TTGCCCAGAA TGTCCACATT TGAAACCTCC CAACACCGAG CCCATTTCAG AGTATAACCA      300
GGAGGGAAAA TGGTGCTTGA AATAAGCATG CCACAAAGGA AAACCTGCTT TCTCGAAATG      360
GGCCCTGGCC GCCCAGGCC TGACCTCCCC GGCCAGGATG GAACGTTCCA GAAACCCTCG      420
AG

```

## (2) INFORMATION FOR SEQ ID NO:1405:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1405:

```

GAATTCGGCC TTCATGGCCT ACTGGGGTCC AAACCTGGATA TCTTGGTGGA GAACATGGGG      60
AGGCTCAGCT TTGGGTCTAA CAGCAGTGAC TTCAAGGGCC TGTGAAGCC ACCAATTCTG      120
GGGCAAACAA TCCTTACCCA GTGGATGATG TTCCCTCTGA AAATTGATAA CCTTGTGAAG      180
TGGTGGTTTC CCCTCCAGTT GCCAAAATGG CCATATCCTC AAGCTCCTTC TGGCCCCACA      240
TTCTACTCCA AAACATTTC AATTTTAGGC TCAGTTGGGG ACACATTTC ATATCTACCT      300
GATGGACACT CGAG

```

## (2) INFORMATION FOR SEQ ID NO:1406:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1406:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCGACTGCCC CAAACCTGAC      60
CCATCCTCAG ACCCCACCC CCGTCACCGC TCCTCCCAAT GATTCCTCCC TCTGTGAGTC      120
CTGCTCTACT TTCCAAATCC TCGCCTGCTC CAAACCTGAC CCATCCTCAG ACCCCACCC      180
CCGTCACCGC TCCTCCCAAT GATTCTTCCT TCTTTGATCC TGCCAACTTT TCCCAACAG      240
CACCCTAATC CTCCCCAAA TCATCACAAT CCTCCACCAT ACAATCCCGC GTTCTCGAG      299

```

## (2) INFORMATION FOR SEQ ID NO:1407:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 199 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1407:

GAATTCTAGA	CCTGCCTCTC	GCTGGAAATC	AGCGTTGTAA	GATGGACGCC	CTGCTCAGCA	60
GAGCTCATCT	TTCTAGAAAG	GCACCTGGCC	TTGGAAGGCG	AGTGAGGAAC	TGCATAAGG	120
ACTTTTCTT	CCCATGTTGC	TTTTCAGGAA	AGCTTTCAGG	ATGTGGAAAT	GATGGTTCAG	180
CTATTGGATG	AGGCTCGAG					199

## (2) INFORMATION FOR SEQ ID NO:1408:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1408:

GAATTCGGCC	TTCATGGCCT	AGTGATCCAG	AAGAATTACC	ATTAACTTTA	TTTCAGAATT	60
TAGACTTCCA	AATCAGGTTA	ATCCTCCAAT	TAAAAGAAAAG	ATTCAGAGTG	AATTTTAA	120
AAGGCAAGGC	AGTTATATGT	TGCTTACAAG	AACTAAACA	TAAAGGCACA	GATAAGTTGG	180
AAGTAAGAGG	GAAAAGACA	TGCGAATACT	AAGTATAGAG			220

## (2) INFORMATION FOR SEQ ID NO:1409:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1409:

GAATTCGGCC	TTCATGGCCT	AGATAAGCCC	TTCAGAAACA	CATGCACTGT	TAATTCTGTT	60
TTAAATATAA	TAAAACCAT	TCACTTTGA	CATTACCTAT	TAAGTTTAC	TGAAAGTCAA	120
AAGGCTACT	TACTGTGACT	TCCAAAAAAG	TATTTTGATA	ATATTTTGAA	AGAAATAAAT	180
AATTTCCCTT	TGCATGAAAT	TAAAAGCCAT	GATAATAGGG	AAAACATTAC	TCGAG	235

## (2) INFORMATION FOR SEQ ID NO:1410:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 577 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1410:

```

GAATTCGGCC TTCATGGCCT ACCCACGTAA CGGCTTGGCT GGGCACCCCC GCTTGGCTTG      60
GTGGTCCTGG TTTGGATTGG CTTTACCCTG GCATTCCTTT GCTGGGCTTG ACCTTTTCTT      120
GCTGGGCTTG GCATTCCCCT GGCTGGGCTG GGTGTTTCCC CGGTGGGGCG TGCACTTTCC      180
CTGGGTGGTG GAGGGGGCGT GGGCTCTCCC CGGGTGGTGG GGGGACGTGG GATCTCCCCA      240
GTTGGTGGTG GGGGAGGGGT CGTGGGCTCT CCCAGGTGGG GGTTTGGCT GGGATTGACC      300
TTTCTCCCCT AACAGATTGG AAACTCGTAA TTTCCCGCTT TTTGGTGAAG CTCGTTGACA      360
GACACCATCT GCTCGCTACT ACCAGGCTGT TGAAAGCAGA TGGTGGCTGA GGTTTCTCCA      420
AAGCTGGCTG CCTCCCCTAT GAAGAAGCCC TTTGGCTTCA GGGGCAAGAT GGGCAAGTGG      480
TGCTGCTGCT GCTTCCCCTG CTGCAGGGGA AGCGGCAAGA ACAACATGGG TGCTTGAGA      540
GACCACGACG ACAGCGCCTT CACGGAGCCC ACTCGAG      577

```

## (2) INFORMATION FOR SEQ ID NO:1411:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1411:

```

GAATTCGGCC TTCATGGCCT AGGGATGCCT CTCAGTGACC CTTATATGTC AGGTATGAGG      60
CGGATGGGGC ATCTCTCTAG TCCTTTCTAG GGTTTTTACT CTTCTAGTCC CTTCAAGGGC      120
TGAGTGCTCT GACTTTATGT CTTCCACGT AGGCGTTGAC CCTGCACTAT CAGATCCTGT      180
GTTGGCCCCG CGCCTTCGGG AAAACCGGAG TTTGGCCATG AGTCGCTGG ATGAGGTCAT      240
TCCTCAATAT GCAATGTTGC AAGACAACCC TCGAG      275

```

## (2) INFORMATION FOR SEQ ID NO:1412:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1412:

```

GAATTCGGCC TTCATGGCCT AGTTTTATTT TGCAGTTGGA AATATGTCAG AAATCACTTG      60
AAGGCAAATA AGATCTGGCC CTCTGCAGAG TTAAGTGGCT AACATGCCCT AGATCTCCAG      120
GCTTAGAGGC TGCCCCTTTG GTACCCATGA TTCTCCAGGC CTTTCCAGGG CAACATTGTC      180
CAGCATCTCT CTCTCTCCTC CCGCGTCTT CTTTGGGAAG TTTGACTCTC ATGTGTGGTG      240
CCCGATCCCT AGGCCACCTG TGCCGGCCAG CCCCTGAACA GATAAATCCT ACTAAAGGTT      300
AATCCCAAGC ACAAGCTTTG GGCTGGTCCT TCTGGGTTGA TTGGCTTCT CTCTCTCTCT      360
CCTTTTTTGA GATGGAGTCT CTTCTGTCTG CCCAGGCTGG AGTGCAGTGG CACAATCTCG      420
ACAATCTTGG CTCACTGCAA CCTCTGCCTC CCGGGTTCAA GCAATCTCC TGCCTCAGCC      480
TCCTGAGTAG CTGGGATTAC AGGTGCCCGC CACTGCTTCT GGCATACTCG AG      532

```

## (2) INFORMATION FOR SEQ ID NO:1413:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1413:

```
GAATTCGGCC TTCATGGCCT AGGCATCCAG GACAAAAGTT TGGAAAACAA AATAATGGAA      60
CTAAATAGTA CTAACCAAAG TATAGGGTGC TTTATGATTT ACAGAACTCT CTTACAGGCA      120
GTATGTTGTT CAGGCGCCAC TAGAACCAC GTAATGGCAG AGGCTTCCTG TTCCATGTTT      180
AAAAACCTTT CCAAGGCTTT TCATTATTTT CTTATCTGTG GTACCCCTAG CTCCTGTGC      240
TCTAGACACA CTGGCCTACC TTCAACTTCC TTGACCAGTG TAGCTTACAG TGTAAGCTTA      300
CCCCCGCCC CCACCCTCGA G                                321
```

(2) INFORMATION FOR SEQ ID NO:1414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1414:

```
GAATTCGGCC TTCATGGCCT ACATGAACGG AAGAGTGGAT TATTTGGTCA CTGAGGAAGA      60
GATCAATCTT ACCAGAGGGC CTCAGGGCT GGGCTTCAAC ATCGTCGGTG GGACAGATCA      120
GCAGTATGTC TCCAACGACA GTGGCATCTA CGTCAGCCGC ATCAAAGAAA ATGGGGCTGC      180
GGCCCTGGAT GGGCGGCTCC AGGAGGGTGA TAAGATCCTT TCGGTAAATG GCCAAGACCT      240
AAAGAACCTG CTGCACCAGG ATGCTGTAGA CCTCTTTCGT AATGCAGGCT ATGCTGTGTC      300
TCTGAGAGTG CAGCACAGGT TACAGGTGCA GAATGGACCT ATAGGACATC GAGGTGAAGG      360
GGACCCAAGT GGTATTCCCA TATTTATGGT GCTGGTGCCA GTGTTTGCCC TCACCATGGT      420
AGCAGCCTGG GCTTTCATGA GACACCGGCA ACTCGAG                                457
```

(2) INFORMATION FOR SEQ ID NO:1415:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1415:

```
GAATTCGGCC TTCATGGCCT AAAAATATCT AGTCACTGTT CTGTTTACC CATTCTTTTA      60
AACTTTGTTT TTCAGTTTCA GTCAGGCTTC CAAGAAACT GATAACATTT TGATTGGTTG      120
GTTTCTCTTA TATCTTTTTC ATTTACAGT ACATTGTGAT TTAATGATTT ATCTCTTAAA      180
TCTTTTTCAG TTCATAGGTT CCTCCTGTCT CTTTCTTTT CTTGCACTT CATTTGTTGC      240
AGAACCTTTG TCCTGTGGTT TCGCACAGTC TGGAGGAATT GGGGAAAGTG GCTGTCTAAA      300
CTGGTTCCCT CCTTCCATT ACTGCTGCAA TCAAGATGTT AGGGGGCCTA CAAGCAATAG      360
AAGCATCCTC GAG                                373
```

(2) INFORMATION FOR SEQ ID NO:1416:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid



(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1416:

GAATTGGCCT	TCATGGCCTA	GTCATTTGCT	TTTATATCAG	ATATCTAATT	AATCAAACCT	60
TCTGGTTAAG	TGCCTCCAAT	TATTAACAAT	CCTGCTCAGA	GTAAAGATTA	GCATCCAAGG	120
ATTTTCCTCC	ATATTTCTTT	TCAGAGGCAA	TGGAATTTAC	TAGTTTTTTA	GCTCTTCAAC	180
TTTGGCTGAT	GGTTTTAGTG	GTGGTTATGC	TATCTTCAGT	AGTTTGGGGA	TCGCTCGAG	239

(2) INFORMATION FOR SEQ ID NO:1417:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 308 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1417:

GAATTCGGCC	TTCATGGCCT	AAGAAAGGTT	AAGTTACTTG	CCTGAGGTAA	CTTAGCATTG	60
ATAGAATTAG	GATTTGAACC	TGGGTAGTAT	GA CTCTTAGG	TCCCCATGAG	CTGGCACACA	120
GGTTGCCAAT	CCATCAGTTA	ACCTTCCCAT	CACTGGGTCA	GAGAGCCAAG	GAGCAGAAGG	180
GGGATAGAAC	TTCCCCAGTA	CCAAACTAAG	GGGCTGAGCT	GGGATCGCAA	CCACAGGTTC	240
TGTTCCAAAG	CTGGGGCTCT	TTGACAAGG	CCATGCCCGC	CTTGTCTCTT	ATGCATGCTC	300
CACTCGAG						308

(2) INFORMATION FOR SEQ ID NO:1418:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 174 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1418:

GAATTCGGCC	TTCATGGCCT	AAACAAACAA	AAAAAATGT	TTTATATGCA	AAAGTTTTTT	60
GTATCATGCT	TGTATAAATC	CAGCTTTTTT	TGTATCATGC	TTGTATTTTT	TTTTTCTAGC	120
TGTTATTGCT	TTTCTGATAA	TAGTACTGAA	TTTGGTGTTA	TGGCTGGTCT	CGAG	174

(2) INFORMATION FOR SEQ ID NO:1419:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 234 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1419:

```

GAATTCGGCC TTCATGGCCT AATTTTATAT TATTGTTAAA CACTGGGCTG GAATTATTGT      60
TTTGGGAAAA GGCCCATGAG AGTTTTTGCT CTGTGGGTTT TTAAAGGTAA GAATAAATTT      120
CGTGTTTGAG ATGTTTTTGA TGTGCCTGTA ACCAGAATAG AAGTGTCTTA GATTATAACT      180
TTCTCTCAGA TTGAGTAATT CTGTTGTAAT AAGTCAGCAT ATGTTGCCAT CGAG              234

```

## (2) INFORMATION FOR SEQ ID NO:1420:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1420:

```

GAAAATATTT TTA CTTTAT AATTGATAGT ATTTCTTAAC TCTCAATTAA AAAAAGTTTT      60
TAAGCATTTT TGTGATATAG ATACTATCAT TTCATATTAC ACAATGCTTC TGATGATTTT      120
GCTGTTGTTG TTAGGGACTA CTCGAGGCAG GTCTAGA                                157

```

## (2) INFORMATION FOR SEQ ID NO:1421:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1421:

```

GAATTCGGCC TTCATGGCCT ACCAGGATGA GAGGGGAAAA AGAAAGCCTC CAGTGA CTTCTC      60
AGTTGCTTTG CCAGTTGTCT TGGGATTGTT TTACACCATC CTTTACTTCC CTTGCTCAGA      120
CCTCTCTGTT TCACCATTCG TCAGGCATTC AGGAAAGTAT CTGCTCACTC CCACTTGGTG      180
AGTCCTCGGC CTTGAGGTTG CTGACTCTCA GGC GTTAGGC AGCTGGATGA CTTCCCGCTT      240
CATGCAGCAA AGGCCAGGGG CTTGCGCGCC TCTGCAGAGT TGTGCTAGG GAGACTTGTG      300
TCATCATCCA CAACCTTGTT TCTCACTTCC TGGTTGGGCT CATCTCTGAA GAACAGGTCT      360
CCCAGCTTCG CTCCTTATCA CTGCATTGTG AAGAGGAGGA AAAGTGAATC ACGGAGAGAG      420
AAAGGAAAGG ATAGAATCAC AGGCTGCATC TGCACCTGAA AAGTGACCCG CGGAAACTCT      480
ATGGCGGATC TCGAG                                495

```

## (2) INFORMATION FOR SEQ ID NO:1422:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1422:

```

GAATTCGGCC TTCATGGCCT AGACAAAAGT AGAATTAGTA AACTACTACA TTGAGTACAC      60
TTTGTGTTAA AATTCATAGG GAAGACTTCT TAAAAACAAG TGAAATTGTT AAACCCCCC      120
CTAAGCATTA CAGATGGCTT ATAGCTGTCC ACGGGGTTGG TAGAGGTGGG AAAGGGAAGG      180
GTTCTAGGCC AGAATGTTCC TATTAGAAG AACTCAAAT TACAGTCTGT GTTATGTATG      240

```

TATACCATTT ATTCAATGCT ACTGTGTATA TAATGGAAAA CTTAAGTCCA GTTTGAAACA	300
TCTAGTCTTT CTAGGTGTTT AAAAGTGTAC AACAGCCTGT CGCAGTGGCG CATGCCTGTG	360
GTCCCAGCAC TTTGGGAGGC CGAGGCAGGC GGATCACGAG GTCGGGAGAT CGGGACCATC	420
TTGGCCAGCA TGGTGAAACC CCTCTCGAG	449

## (2) INFORMATION FOR SEQ ID NO:1423:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1423:

GGGAGTTTAT TATTCATTAA CGAAATTAGC CCTTTTATCT GCCATATAAT TTGCAACAAT	60
TTTATATCAG CTTTTTTTAT GTCTTTTGGC TGTTGTATG AAAGTTATGG CCATGCAGAA	120
ATGTGGGATT TTATGTAGCA CAGTTGTCTC TTTTTTTTTT TTTTGAGACG GAGCCTAGCT	180
CTGTCACCCA GGCTGGAGNG CAGTGGCATG ATCTCGGCTC ACNGCAACCT GTGCCTCCCA	240
GGTTCAAGCA ATTCTTCAGT CTCAGCCTCC CAAGTAGCTG GGACTACAGG CGCCACCC	300
CTCGAG	306

## (2) INFORMATION FOR SEQ ID NO:1424:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1424:

GAATTCGGCC TTCATGGCCT AGAACTTTGT ACACCATGGA ATGTTCTACT TATTATTTTG	60
TGCTACAATA TGTGCTGTTT CTTTGTGTTG AATTGCAGAT TGTCTACTAT GAAGCAGGGA	120
TTATTCTATG CTGTGTCCTG GGGCTGCTGT TTATTATTCT GATGCCTCTG GTGGGGTATT	180
TCTTTTGTAT GTGTCGTTGC TGTAACAAAT GTGGTGGAGA AATGCACCAG CGACAGAAGG	240
AAAATGGGCC CTTCTGAGG AAATGCTTTG CAATCTCCCT GTTGGTGATT TGTATAATAA	300
TAAGCATTGG CATCTTCTAT GGTTTGTGG CAAATCACCA GGTAAGAACC CGGATCCTCG	360
AG	362

## (2) INFORMATION FOR SEQ ID NO:1425:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 194 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1425:

GAATTCGGCC TTCATGGCCT AGTATATCTG AAAAGTACAC TGTGTTTGA AATTATAAAT	60
TTTCATTCTG AATGAGGTTT CTTTTTTTGA TTTTCTTTAA AAAAAAAAAA CAACCTGCTT	120
TGATTGCTT TACATTCCTT GCCCTCCATT TTTCTTATTA TATTGTAAAC ATTAGAAAAA	180

TGAACACCCT CGAG

194

## (2) INFORMATION FOR SEQ ID NO:1426:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1426:

GAATTCGGCC TTCATGGCCT AGCCATGTAT TTTCTAATAT CCCTTGGACT TCATCTTTGA	60
CTCATGTTTT ATTTGAAGT ATTGGGATTG TTTTTCAGTT ATCTTCTGT TATTATTTCT	120
ATTTAATTCT GTTATGGTCA TACAACATAA TTTAAATTCT TCTAAATTTG TTGAGGATTG	180
TTTTTGTTCG CCAGAATATG ATGAATCTCT CATTGAATGT TGTATGTGCA GTTGAAAAGA	240
ATGTTTATTC TGCTGTTGGT GGGTAAAGTG TCATGAATAT AATTAGGAGA AATTAATGAT	300
AGTGTTAAGG TTTTCTATAT CCTTGCTTTT TTGGTGTACT TATTTTATTG ATTATTGAGA	360
GAGAAGGGTT GAATTATCTA GGTGCAACTC GAG	393

## (2) INFORMATION FOR SEQ ID NO:1427:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1427:

GCGATTGAAT TCTAGACCTG CCTCGAGCCA CCCCCTTAAT GTGTGTGTTG ACAGTGAAGT	60
CCTTGGGTGG GGCCATGTGT GTGTTGTGA TGTCCTTAA GTTGATGCAG CTTCTCGAG	119

## (2) INFORMATION FOR SEQ ID NO:1428:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1428:

GAAAAAGCAG TAAAAATAGA AATCCATCTT CACCAAGCCT TTAAAGCAAT ATAAATTTAT	60
ACTGAGGTTC CTGCATACTA TAACACACAG AAGGAATTCC TAAAAATGTT CTTTATCCAG	120
CTGTCTACCC AAAGTTCTAT CATCCTGGCA AACTGCTCTC TCCAAAATTC ATCATCTTGG	180
ACTCTCTCTG AAATCCAAAC CCTTCTCTCT TATACCCTGT TCTCCAACAT TCGAATTTGT	240
TTAGTTTGTG TTCTTCCTAA TATAGCTATT TCTGTTTACC ATTTTGAGCT CTGGAACCTC	300
AACCACTACT TACCACCAA ACTCGAG	327

## (2) INFORMATION FOR SEQ ID NO:1429:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 325 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1429:

GAATTCGGCC	TTCATGGCCT	AATCACATAT	ACACAATTTA	CCCATTTC	GTGTACACGT	60
AGTGGTTTTA	GTATATTTAC	AGATAGGTGC	AACTATCACC	ACAGTCAAAT	TTAGAACCTT	120
TTCATCAACC	CCAAAAGAAA	CACCATACCC	TTTAGGTATC	GCCTCCCCTA	TACTCCACCT	180
TCCAACCTGCT	GAGCCCTAAG	TTACCACTAA	CCTTCCTATC	TCTATAGATT	TCCTTATTCT	240
GAACTTTTGA	ATGGAATTAC	AGTATCTGGT	CTTTTGTGCC	TGTTTTTTTT	TGACTAATGT	300
TTCAAGGTTC	ATCCAGGCCC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:1430:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 226 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1430:

GAATTCGGCC	TTCATGGCCT	ACCTAAACCT	GGCAGAGTAC	ATCATGCCTC	CGAGAAGAAA	60
CGTCATTCCA	CTCCTTTGCC	GAGCACTGCT	GTACCAAGCC	ATACACCTGG	CAGCAGCCAG	120
CAGTCCCCGC	TCAACAGTCC	TCACCCGGGG	CCCATCCGGA	CAGGCCTGCC	TCCTGGGCAC	180
CAGCAGGAAT	TTGCCGGACG	AGCCAACAGC	ACCTCCAACC	CTCGAG		226

(2) INFORMATION FOR SEQ ID NO:1431:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 256 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1431:

GAATTCGGTT	CATGGCCTAG	GATTAACAAC	TTGGAAAAGG	CCTATGATAC	TCCTGGTAAA	60
CCTCTTTGTG	CTGCTCTCTG	TGGTTTGTGT	CCTCTTAAAT	CTAGCTGGAT	TTATCCTAGG	120
CTGCCAAGGG	GCCCAGTTTG	TGTCCAGCGT	GCCCAGGTGT	GATCTGGTGG	ACTTAGGTGA	180
AGGCAAGATT	TGCTTCTGTT	GTGAAGAATT	TCAACCAGCC	AAGTGCACAG	ACAAAGAAAA	240
TGCCTTGAAA	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:1432:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 240 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1432:

GAATTCGGCC	TTCATGGCCT	AGGTTGCGGT	GAGTCGAGGT	CTGCACTCCA	GTCTAGGTGA	60
CAGAGCCAGA	CCTGGTCTTT	AAAAAAAAAA	AAAAAAAAAA	AGTGAATTCA	AAAGATTAGC	120
TAAGACAAAT	TGGGAAAAAA	AACCAAAAGG	GGAGTTGACC	TAACAGATAT	TAAGATGTAT	180
TTCTAAAGCC	ATAGCAGCTA	AAATAGTACA	GTATTAATGT	AGGGACAAAC	AGAACTCGAG	240

(2) INFORMATION FOR SEQ ID NO:1433:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1433:

TCATTCTGAA	CAAAAGGGAT	TAGAGAAGAA	AAATCTCTTG	ATATAAGGCT	TGAAAGCAAG	60
GGCAGGCAAT	CTTGGTTGTG	AATATTTTCT	GATTTTCCA	GAAATCAAGC	AGAAGATTGA	120
GCTGCTGATG	TCAGTTAACT	CTGAGAAGTC	GTCCTCTTCA	GAAAGGCCGG	AGCCTCAACA	180
GAAAGCTCCT	TTAGTTCCTC	CTCCTCCACC	GCCACCACCA	CTCCTCGAG		229

(2) INFORMATION FOR SEQ ID NO:1434:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1434:

GAAATTGAAA	CTCAAATCAG	TTAGCTTCAA	ACAAAAACGA	AAGTTAGACC	AAGGGAACGT	60
ATTAGATATG	GAAGTAAAGA	AAAAGAAACA	TGATAAACAA	GAACAGAAAG	GAAGTGTTGG	120
AGCTACATTC	AAATTAGGTG	ACTCTTTGTC	AAACCCAAAC	GAAAGAGCCA	TTGTTAAAGA	180
AAAGATGGTA	TCAAATACTA	AGTCTGTAGA	CACGAAAGCG	AGTTCATCTA	AATTTAGTAG	240
AATTCTAACT	CCTAAGGAGC	ATCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:1435:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1435:

GAATTCGGCC	TTCATGGCCT	ACAAGACTGT	CTCAAAAAGA	AAAGAAACAC	AAATATTTGA	60
ACTCCAAATA	TTCTTTGTGT	GTAGAAAAAT	CTAATGGATA	ATTAAAACTA	GAGCAGAGAG	120

AAAAGCCTAG GAGTTGAGAG ATTTTATAGAT ACGTGACTGA AAAGATTGGA AAAGGCTATC	180
AGTTTTAATG CTTGTGTCTG TCTTTGTGTG GGCCATGGTA TTTTGGAAGA GCACCATGGA	240
GCTCGAG	247

## (2) INFORMATION FOR SEQ ID NO:1436:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 258 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1436:

GAATTCGGCC TTCATGGCCT ACCTATTTGT GCATCAAGTG GTTATCTAAA TAGTTTGAAA	60
GGATTGATAT ACTACATTAT ACGTCAAAAA TAAATAAATA AAATTAAGAA GACAGGGATT	120
CCAAGATTGT AGCTGACCAA GCTGTCTTGT TTTGCGTACA TCAACACTAT GCTGCTTCCA	180
ATATTCCTAG CCATTCCACA GGTAATGATT TTTCAACAAT CAAGAGAAAG TCATTCTTGT	240
ACTGTAACAT CTCTCGAG	258

## (2) INFORMATION FOR SEQ ID NO:1437:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 415 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1437:

GAATTCGGCC TTCATGGCCT AAATCACTTG GATTGGTTCT CTACTTAAAA CACAAGCTAG	60
CTACCCAGTC TTGTATTTTG TATTTTAAAG AATTGTTAAA AAATAATTT TGTTTGTAT	120
TTGTGTAAAG CATAGTCATA ATTCTAAATC AAACACACTG CATCGAGTTT ATCACTGAAA	180
TTCAGCATCT GCTTTTGTCC TCACTTTGTT ATCTTCTGCT CTCATCGATT ACAGGCGTGA	240
GCCACGCGC CCGCGGTAT GTTCCTTACC CTTAAGGACA AGAAATACCG TTTGAAAACA	300
TTCTTCTTGA ACATTAACAA ACTTAGAATG GTACATTCAT TTAAGAATTA AAATAGGCAC	360
AAGAGGATTG AATTTTGGAA ATATGTTGCT TAGAAATTTG GGGGCAATTC TCGAG	415

## (2) INFORMATION FOR SEQ ID NO:1438:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 267 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1438:

GCGATTGAAT TCTAGACCTG CCTCGAAGTG CCAGCAGCAG AGGAGATGAC AGTGACATAT	60
ACAACAGAGG CTGGGGTGGG CACTCCAGGA GCCCTGGAGC GGAAGACCTC AGGGCTAGGA	120
CAGGAGCAAG AGGAAGGGTC AGAGGGCCAG GAGGCAGCCA CTGGGAGTGG CGATGGGAGG	180
CAGGAGACAG GAGCAGCTGA AAAATTCCGA TTAGGATTAT CACGGGAGGG AGAGAGGGAA	240
TTGAGTCCGG AGAGTCTACA GCTCGAG	267

## (2) INFORMATION FOR SEQ ID NO:1439:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 301 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1439:

```

GCGATTGAAT TCTAGACCTG CCTCGAGTCA TATCCCTGAG CAGTAGAGTA AATTAAATCC      60
TTTCTGAGAG TCTTAGATGT TTTTCTATGT CTCTTCTTTC TTATTCTCTC TCTGTTTCTT      120
TCTCTCACTC ACACACACAC ACACACACAC ACACACACCC CTAAAATTG TTCTGAATGG      180
CCCACTAGGG CTGAATCATT TAGTGACTTC ATTGATTACT ATCCTGAGTT CTTCTTCTCTG      240
CTCCAGACT AGTGAAAATA TTCCAGAAAG CTTTAATATT GGAGAAAAG CAACGCTCGA      300
G                                                                    301

```

## (2) INFORMATION FOR SEQ ID NO:1440:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 251 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1440:

```

GAATTCCGCT TCATGGCCTA GCATTTGGAA GTAATTTTT AAAACAACAT TCATATTAAT      60
TTAAGGAGCA TAACAGATTC CAGTGAATGT TATGATTCGC TATTGTAACA TTATTCTAGT      120
AAATATGTTG GAGAAGAACA GTTCTAGTGA ATTAAGTATG GTTTTGAAG GCAGCTATGC      180
TCACCATCAT ACCACCAACA CAACCATGGT TTTATTTTAT ATTATTTATT TTATTTTGA      240
GACAGAGTCT C                                                                    251

```

## (2) INFORMATION FOR SEQ ID NO:1441:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 274 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1441:

```

GGAATTGGAA AGCGTTTCCT TGCCAACACC AGAAATCCAG TCAGATTCT TACATAGCAA      60
AGTCGAAGCT CCTCCTTCAG AGGTGGCGGA TACGTTAGTA ATAATGACTG CTTCCAAGGG      120
TGTTGACTC CCAGAACCCA AAGATAAGAT TTTGGAGACA CCTCAGAAAA TGACAGAAAA      180
ATCTGAATCA AAGACACCAG GAGAAGGGAA AAAGGAAGAT AAAAGCAGAA TGGCAGAACC      240
AATGAAAGGC TACATGAGAC CCACCAAGCT CGAG                                                                    274

```

## (2) INFORMATION FOR SEQ ID NO:1442:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 274 base pairs



(B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1442:

GAATTCGGCC TTCATGGCCT ACCTTCTCTCC ATGTTTAACT GGGCTGCTCC CCATTCTCTG	60
CCTCCCTGTC TCCTCAGCCG CCAGAGCCCA GCCCTCCGA CCAGGCCTCA CCCACCCCA	120
CCCGACCCTT CCCTGAGGGT CCTTTCCTCA GTACCACTGA CACTTGGAGG CAGGAAACCC	180
AAACCTCCTT AACTAAGGCC TCATTACCT CGAAAGCAGT GGTGCTTCCC TCTGTTTCAT	240
CAGGGCCATA AAGCCACTGT CCCCTTAACT CGAG	274

(2) INFORMATION FOR SEQ ID NO:1443:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 257 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1443:

GAATTCGGCC TTCATGGCCT AATTGCGCCA TTGCACTCTA GCCTGGGCGA CGGAGCAAAA	60
CTCCATCTCA AAAAAAAAAA AAAAAAAAAANN NANTCNGAAA CAGAAAAAAA AAAAGAATA	120
CACTGCATTG CCATTATCTA GTCACCCTGT GTAATATAGC AGCAGAACTC ATGCTTCTCTG	180
TCTTAACCTG AACTTTGTAT CTGCTGACCA ACCTCTCTCC ATCCCTCCT CCCACCTACC	240
CTCCCCAGTC CCTCGAG	257

(2) INFORMATION FOR SEQ ID NO:1444:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 258 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1444:

GAATTCGGCC TTCATGGCCT AGGAAGCATT AAATTGGGCC ATAGGAAGGA CAAGTCACAT	60
CCAGTTTAGT GATCAATGGT GGTTTGGGAA AGAAATAACA GAATTCTACT CCTACATGAT	120
AGGGAGAGAC TACAGAGGCC ACCTAGACCA ACAAACCTCTG CCATCAGGTC CTGAATCAT	180
TGCTACCATG TCCTGGTGGT GGTTGTAGCA TTGCTAGTGA TATGTAACCT ATTACCTACT	240
TATGCAAACC ATCTCGAG	258

(2) INFORMATION FOR SEQ ID NO:1445:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 638 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1445:

```

GGATGGCTAC GGCAGGGGGT GGCTCTGGGG CTGACCCGGG AAGTCGGGGT CTCCTTCGCC      60
TTCTGTCTTT CTGCGTCCTA CTAGCAGGTT TGTGCAGGGG AAACCTCAGTG GAGAGGAAGA      120
TATATATCCC CTAAATAAAA ACAGCTCCCT GTGTTCGCCT GCTCAACGCC ACTCATCAGA      180
TTGGCTGCCA GTCTTCAATT AGTGGAGACA CAGGGGTAT CCACGTAGTA GAGAAAGAGG      240
AGGACCTACA GTGGGTATTG ACTGATGGCC CCAACCCCC TTACATGGTT CTGCTGGAGA      300
GCAAGCATT TACCAGGGAT TTAATGGAGA AGCTGAAAGG GAGAACCAGC CGAATTGCTG      360
GTCTTGCA GTCTTGACC AAGCCCAGTC CTGCCTCAGG CTTCTCTCCT AGTGTACAGT      420
GCCCAAATGA TGGGTTTGGT GTTTACTCCA ATTCCNATGG GCCAGAGTTT GCTCACTGCA      480
GAGAAATACA GTGAATTCG CTGGGCAATG GTTTGGCTTA TGAAGACTTT AGTTTCCCA      540
TCTTTCTTCT TGAAGATGAA AATGAAACCA AAGTCATCAA GCAGTGCTAT CAAGATCACA      600
ACCTGAGTCA GAATNGGTCA GCACCAACCC GACTCGAG      638

```

## (2) INFORMATION FOR SEQ ID NO:1446:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1446:

```

GCGAGCTCGT GTTTTAAAGG ACCAAATAGA AGTTTACCAG GAGAGAAGTG ACAGAAGTGC      60
TGTCTAGATA GAGGAAGGGC ACACACAGAT GCAAGCATGT GCAGAAATGA GCAAACCACT      120
GAGACGCTGC CTTGAGCTCT GTGTCACACT GCTATGTTGC AGCCTGGGAG GCTGTTCCCA      180
GTTGAGCCCT TCGGAACCAG CCATGAGATG GCACGGGTAC GCGGAAGGGA GCAGTCTCCA      240
TGGCTGGGTG GTGATGGGGG CTTCTCGAG      269

```

## (2) INFORMATION FOR SEQ ID NO:1447:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1447:

```

GGTCTCTCGC CGCCGGAGGA AGATGAGGCT GAAGATTGGA TTCATCTTAC GCAGTTTGCT      60
GGTGGTGGGA AGCTTCCTGG GGCTAGTGGT CCTCTGGTCT TCCCTGACCC CGCGCCCGGA      120
CGACCCAAGC CCGCTGAGCA GGATGAGGGA AGACAGAGAT GTCAATGACC CCATGCCCAA      180
CCGAGGCGGC AATGGACTAG CTCTGGGGA GGACAGATTC AAACCTGTGG TACCATGGCC      240
TCATGTTGAA GGAGTAGAAG TGGACTTAGA GTCTATTAGA AGAATAAACA AGGCCAAAAA      300
TGAACAAGAG CACCATGCTG GAGGAGATTC CCAGAAAGAT ATCATACTTC TCGAG      355

```

## (2) INFORMATION FOR SEQ ID NO:1448:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1448:

```

GAATTCGGCC TTCATGGCCT ATCCTCTGCC AAGACCAAAA GGAAAGAAGA AAAAGGGCCA      60
AAAGCCAAAA TGAAACTGAT GGTACTTGTT TTCACCATTG GGCTAACTTT GCTGCTAGGA      120
GTTCAAGCCA TGCCTGCAAA TCGCCTCTCT TGCTACAGAA AGATACTAAA AGATCACAAAC      180
TGTCACAACC TTCCGGAAGG AGTAGCTGAC CTGACACAGA TTGATGTCAA TGTCAGGAT      240
CATTTCTGGG ATGGGAAGGG ATGTGAGATG ATCTGTTACT GCAACTTCAG CGAATTGCTC      300
TGCTGCCCAA AAGACGTTTT CTTTGGACCA AAGATCTCTT TCGTGATTCC TTGCAACAAT      360
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1449:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1449:

```

GATTCTTAC CCAAAGCTCT GGAATTGTAC ATTTATTTTT TAAAACTCAA AGAGGGAAAG      60
AGCCTTGAT CATATGTGAA CATTGTATCA TAGGTAATGT TGTACAGACC CTTTATACA      120
GTGATCTGTC TTGTTCTGTC AGCAAAAATC CTCTATGGAC ATAGGAGGTG CTGTGTCCCA      180
TGCCCTCTTG CCCTGACAGT GTCCCATGGG CCCCCTTCTG CTCCCTGCCC CCTCCCTGCT      240
ACTGCTGATG CACTCCCCC CCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1450:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1450:

```

GCGATTGAAT TCTAGACCTG CCTCGAGAJC TGGGGGGAGA TTGGGCTCCC TTTCCTCATG      60
ACATCTTGCC CTATCAGGAC TCTGGAGATA GTGGGAGCGA CTACCTTTTC CCAGAAGCTA      120
GTGAAGAATC AGCAGGCATC CCGGGAAAGT CAGAACTTCC CTACGAAGAG CTGTGGCTGG      180
AGGAAGGCAA GCCCAGCCAT CAGCCTCTCA CTCGCTCTCT GAGCGAGAAG AACAGATGTG      240
ATCAGTTTAG AGGTTCTGTC CGATCCAAAT GTGCGACTTC TCCTCTTCCC ATCCCTGGGA      300
CTCTGGGAGC AGCAGTGAAG TCTTCAGATA CTGCCCTACC TCCACCTCCA GTGCCTCCCA      360
AATCTGAAGC CGTCAGAGAA GAATGCCGGC TCCTGAACGC CCCACCTGTT CCACCCCGAA      420
GCGCACTCGA G

```

(2) INFORMATION FOR SEQ ID NO:1451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1451:

GCCTGCCCCC	ACCTTACAGG	TCTGGGATGT	ACCTTTCCAT	CTGTTGCTGC	TTTCTTCTAT	60
GGGCCCCTGC	CCTCACTCTC	AAGAACCTCA	ACTACTCCGT	GCCGGAGGAG	CAAGGGGCCG	120
GCACGGTGAT	CGGGAACATC	GGCAGGGATG	CTCGACTGCA	GCCTGGGCTT	CCGCCTGCAG	180
AGCGCGGCGG	CGGAGGGCGC	AGCAAGTCGG	GTAAGTACCG	GGTGCTGGAG	AACTCCGCAC	240
CGCACCTGCT	GGACGTGGAC	GCAGACAGCG	GGCTCCTCTA	CACCAAGCAG	CGCATCGACC	300
GCGAGTCCCT	GTGCCGCCAC	AATNCCAAGT	GCCAGCTGTC	CCTCGAG		347

(2) INFORMATION FOR SEQ ID NO:1452:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1452:

GGGGCAGAAG	TTGAATATAC	CGGCAATTTT	GCGAGCACCC	AAGGAGAGAA	AACCAAGTAA	60
AAAAGAAGGA	GGCACACAAA	AGACATCTAC	TCTTCTTGCA	GTACTTTATA	GTTGTGGGAT	120
TTGTAAGAAG	AACCATGATC	AGCATCTTCT	TTTATTGTGT	GATACCTGTA	AACTACATTA	180
CCATCTTGGA	TGTCTGGATC	CTCCTCTTAC	AAGGATGCCA	AGAAAAGACCA	AAAACAGTTA	240
TTGGCAGTGC	TCGGAATGTG	ACCAGGCAGG	GAGCAGTGAC	ATGGAAGCAG	ATATGGCCAT	300
GGAAACCCTA	CCAGATGGAA	CCAAAACAAC	TCGAG			335

(2) INFORMATION FOR SEQ ID NO:1453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1453:

GCGATTGAAT	TCTAGACCTG	CCTCGAGATC	CCCATGACTC	CTACATCCTC	TTTGTGTCT	60
CCGCCACCAC	CCACTGCCTC	ACCTCATTC	AACCGGACCA	CACCGCCTGA	AGCGGCCCCG	120
AATGGCCAGT	CCCCCATGGC	AGCCCTGATC	TTAGTAGCAG	ACAATGCAGG	GGGCAGTCAT	180
GCCTCAAAAG	ATGCCAACCA	GGTTCACTCC	ACTACCAGGA	GGAATAGCAA	CAGTCCGCCC	240
TCTCCGTCCT	CTATGAACCA	AAGAAGGCTG	GGCCCCAGAG	AGGTGGGGGG	CCAGGGAGCA	300
GGCAACACAG	GAGGACTGGA	GCCAGTGCAC	CCTGCCAGCC	TCCCGGACTC	CTCTCTGGCA	360
ACCAGTGGCC	CGCTGTGCTG	CACCCTCTGC	CACGAGCGGC	TGGAGGACAC	CCATTTTGTG	420
CAGTGCCCGT	CCGTCCCTTC	GCACAAGTTC	TGCTTCCCTT	GCTCCAGACA	AAGCATCAAA	480
CAGCAGGGAG	CTAGTGGAGA	GGTCTATTGT	CCCAGTGGGG	AAAAATGCCC	TCTTGTGGGC	540
TCCAATGTCC	CCTGGGCCTT	TATGCAAGGG	GAAATTGCAA	CCATCCTTGC	TGGAGATGTG	600
AAAGTGGAAG	AAGGAGAGCG	ACTCGAG				627

(2) INFORMATION FOR SEQ ID NO:1454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1454:

GAAC	TTTGAC	ACCT	ACACTT	AAATT	CTGAG	TCATT	AACA	GGC	TACATT	TATCA	ACTGT	60
GGAA	ATATCA	GCC	AGTTTT	GCAA	ACCTCT	TCTT	AGGACA	CTA	AGTTGTT	TGC	AGAAATC	120
ACTA	GCA	TG	ACTCAG	CAACA	ATGTG	GTT	TATATTCT	TTG	ATTA	ACT	TAGTCCTTTT	180
TCTT	GGTCAA	GAGT	CAGTAG	ACAGG	ACTGA	AGCTT	ATGCC	CCT	TGCCCC	CCAC	CACCAC	240
TCC	ATTACTA	CCAC	CTTGGT	TTAG	CCATCC	TTT	CTTGATC	TGT	TCTCCCC	ACT	TCTACTG	300
TGCT	ACTCTA	CAG	ACTTGCC	CTGA	ATGTAA	GAG	CAACAAT	TAC	CTTGTA	AGT	CCAAGTT	360
GGGG	CAGGTC	ACT	CCCAAAC	TCC	ACAACCT	CGAG						394

(2) INFORMATION FOR SEQ ID NO:1455:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 381 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1455:

CAG	ATGTTCA	GAT	ATATCTT	GAAT	TTTCTA	CGA	ACATCCA	AACT	CCTCAT	TCCT	GATGAT	60
TTCA	AGGACT	ACAC	TTTGTT	ATAT	GAAGAG	GCA	AAATATT	TTC	AGCTTCA	GCCC	ATGTTG	120
TTGG	GATGG	AAAG	ATGGAA	GCAG	GACAGA	GAA	ACTGGTC	GATT	TTTCAAG	GCC	TGTGAG	180
TGC	CTCGTCG	TGCG	TGTGGC	CCC	AGACCTC	GG	AGAAAGGA	TC	ACGCTAAG	CGGT	GACAAA	240
TCCT	TGATAG	AAGA	AGTATT	TCC	AGAGATC	GG	CGACGTGA	TGT	GTAATC	TGT	CAATGCA	300
GGCT	GGAATC	ACG	ACTCGAC	GC	ACGTCATC	AGG	TTTCCAC	TAA	ATGGCTA	CTGT	CACCTC	360
AACT	CAGTCC	AGG	TCCTCGA	G								381

(2) INFORMATION FOR SEQ ID NO:1456:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 309 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1456:

GGT	GACGCCT	GCTT	CACATC	TCT	AATGAAC	ACC	CTCATGA	CGT	CGCTACC	AGC	ACTAGTG	60
CAG	CAACAGG	GAAG	GCTGCT	TCT	GGCTGCT	AAT	TGGCCA	CC	TGGGGCT	CCT	CATGGCC	120
CGG	CTCCTTA	GC	ACCTCTCC	AG	CTCTT	CAG	GGA	ACACCAG	CAT	CCC	GAGG	180
GCT	GCCATCC	TCT	TCTATC	AC	AGTCCCAC	GT	GGCGCGGG	CC	ACCCCGGG	CT	CAGACCAG	240
GC	AGTGCTAG	CC	TGTCCCC	TG	AGTATGAG	GG	CATCTGGG	CC	GACCTGCA	GG	AGCTCTGG	300
TT	CCTCGAG											309

(2) INFORMATION FOR SEQ ID NO:1457:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 374 base pairs  
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1457:

GCACTATTAA	ACAGATACAA	CACAGAATAG	TATGTATAGA	GCATGGTATG	TAGCAGGGGC	60
CTATTCCTGT	CTGAGTGGAC	AAGGAGGCTT	CCTAGAGGAA	GCAACATTTA	AAGCTGAGGG	120
CTGAAGGATG	AATAGGATT	AACCAAGTAA	AAGTAAGAAA	GGAAGTGGGG	AGCTGGAAAG	180
GGCATTCCAG	GAAGAAGAAA	CTGCATGTGC	AAAGGCCAGG	AGGTCAGAGC	GCACAGTGGA	240
TATGACGATG	TGGCTAGCTG	AGCATGTCTG	TGCAGTGTCA	ACTTGTTGT	GAACACAGAG	300
GGAGGCTACT	GGGAAATTTT	AAGCAAGAGA	GTTGGAGTAT	GATCACATTT	GCATGTTAGA	360
AAGACACACT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:1458:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 316 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1458:

GAATTCGGCC	TTCATGGCCT	ACATATTTAT	TATGTCAACC	TGTACTTCCC	TTTCCCTCTT	60
CCTCTCCCTC	TTTTCTCTCC	CTCTCCCTCT	CTCTCTCTTC	CTTCTCCCC	TTCCAGGTAC	120
CCTAGATGAA	CCATGGGAGG	TCCTGGCTAC	ACAGCCATTC	TGTCTGAGAG	AGTCTGAGGA	180
CTCTGAGACC	CAGCCTTTTG	ACACGCACCT	TGAGGCCTAT	GGACCTTGCC	TGTCTCCACC	240
TAGGGCAATA	CCAGGAGACC	AACATCCAGA	GAGCCAGTT	CACACAGAGC	CAATGGGGAT	300
TCCGGGCAGG	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:1459:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 417 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1459:

GGAACCACCA	ATTCCGGACA	CACTGGGATT	ACAGTTCCAG	GAAGGATGTT	ACCTTTGACG	60
ATGACAGTGT	TAATCCTGCT	GCTGCTCCCC	ACGGGTCAGG	CTGCCCCAAA	GGATGGAGTC	120
ACAAGGCCAG	ACTCTGAAGT	GCAGCATCAG	CTCCTGCCCA	ACCCCTTCCA	GCCAGGCCAG	180
GAGCAGCTCG	GACTTCTGCA	GAGCTACCTA	AAGGGACTAG	GAAGGACAGA	AGTGCAACTG	240
GAGCATCTGA	GCCGGGAGCA	GGTTCTCCTC	TACCTCTTTG	CCCTCCATGA	CTATGACCAG	300
AGTGGACAGC	TGGATGGCCT	GGAGCTGCTG	TCCATGTTGA	CAGCTGCTCT	GGCCCCTGGA	360
GCTGCCAACT	CTCTACCAC	CAACCCGGTG	ATCTTGATAG	TGGACAAAGT	GCTCGAG	417

(2) INFORMATION FOR SEQ ID NO:1460:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 222 base pairs  
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1460:

GAATTCGGCC	TTCATGGCCT	ACTGAGAAAA	AAAATCAAAT	CTAATTTTAA	AATGAAGGTA	60
TTTAAACCA	TGGCACAAGG	GAGCCTTATT	TATGGAGCTG	GTGGGAAGCC	AGGATGTTTC	120
CAATCCGCTG	CTCTTACAGG	AGCCTGTGCC	TCGCCAGTTC	TGTGCTGCAG	TGGGCAGCCA	180
ACTGAAGTGC	ATGAGTCAAA	TGCACGAAGC	AGCAGACTCG	AG		222

(2) INFORMATION FOR SEQ ID NO:1461:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 256 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1461:

GCTGCCTCCA	TACTGTTTTA	GGCAGCACCG	TTTATGTGAC	AGAGTCCGTG	TTTCTCAAAT	60
GCATGGTGTT	CCTCAGGTGG	AGAGTGGGCA	GAAGTTTTTG	CAACACTTTT	TTTTTAAGTT	120
ATTGGGTGCA	AAATCCCAAA	CCAGGATATG	TGTATGTCTG	TGTGTTTATG	TTTTTTATTT	180
GACCCCTCCC	TCTTTCAACC	TACCCCTTTT	TATATCTAAT	GTAGAAAAAG	CGAAATTGAA	240
TCTGAAAAAA	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:1462:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 250 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1462:

GGGGGTGGAA	GGCGTAGTGC	TTGAAATGCA	GGGATCTGGC	AGTCAGCAGA	AGGATCTGAG	60
ACCCAGTGTC	GAGGTAAAAA	AAAAAACAAA	AAACCAAAAA	CCAATGCAGG	AATCCAGTGG	120
GTGGAGTGAG	GGGATCTGGG	ATCCAGTGAT	GGGGGCCCCA	GGATCCAGGC	ATTGTGGTTG	180
TCAGGATCCA	GTGGTGAGGT	TTGTTGACAT	CCAGAATCCA	GCAGCTGAGC	TTGGAGATCC	240
AGGGCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:1463:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 279 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1463:

GAATTCGGCC	TTCATGGCCT	AAGTTTATAA	AAATTTCAGC	CAGAAAAACC	CAGGTAAGGA	60
TTTTTTTAT	TTTTTTTTA	TTTTTATTT	TAGACCAGGT	GAGAATCCTT	TGTTCCACTG	120
AGATTTTAAA	ATTTAGTACA	TTCAAAATTG	ATATTCTAC	CATTTTCTCA	GCCTGCTTGT	180
CTTCTTATCT	TTGCAGCACT	GCTTATTGCC	ATCACTGCTT	ATCTGTTTAC	TCAACTTGAA	240
ACCTCAGAAT	TGTCCTTGAC	CTCATCCCCA	CATCTCGAG			279

## (2) INFORMATION FOR SEQ ID NO:1464:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1464:

GAATTCGGCC	TTCATGGCCT	AGGCCATTTG	GTTCTAAACT	GCTTGACTAG	TTTTAAGCTC	60
ACATAATTCC	TTAAGCTTTC	ATATTTCTTT	AAATGCAAGG	AAATGAATAT	AAAAGCACTA	120
AATCTCCTGG	TTCAGTGGTA	CAAAAATTAC	AATGGTCAGT	TCCCTTAGGT	CATCAAAAAC	180
TAGTCACAAA	AATAGTTCTT	GTATTCAACC	TGAATGTGCC	ACAGGAAAAA	AAAAATATTT	240
TCAAGATTTT	CCAGCTCAGC	CTCGAG				266

## (2) INFORMATION FOR SEQ ID NO:1465:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1465:

GAATTCGGCC	TTCATGGCCT	AAACATTTTC	TGAAAAACGT	GATAGAAAGA	AGGAGGAGCT	60
GTTTCTAGGA	GGGAAATAAA	TAATTTGGCA	GGAGACTTTT	TGAAGTAGAT	ATCTATTGAA	120
TAACAAAGTG	ACAATGTTCC	CCATCCTCTC	ATTTCCATTC	CCAATTTTAC	TTCTCGTCCC	180
AATTCAAATC	ATTCTTACTT	ATGATCGGCG	CTATGTCAGT	GCCTCTCAGC	TGGTCTTCCC	240
AGACCCAGTC	ACCCTCGAG					259

## (2) INFORMATION FOR SEQ ID NO:1466:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1466:

GCGCCTATCA	CAAGCAGATC	ATGGGTGGCT	TCAAGGAGAC	GAAGGAGGCT	GAAGATGGCT	60
TCCGCAAGGC	CCAGAAGCCT	TGGGCCAAGA	AGATGAAGGA	GCTGGAGGCA	GCCAAGAAGG	120
CCTACCATTT	GGCTTGCAAA	GAGGAAAAGC	TGGCCATGAC	ACGGGAGATG	AACAGCAAGA	180
CGGAGCAATC	GGTCACACCT	GAGCAGCAAA	AGAAGCTGCA	GGACAAAGTG	GACAAGTGCA	240



AGCAGGATGT GCAGAAGACA CAGGAGAAGT ATGAGAAAGT GCTGGAAGAT GTGGGCAAGA 300  
CCACACCCCA GTACATGGAG AACAACTCG AG 332

(2) INFORMATION FOR SEQ ID NO:1467:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1467:

GCTCGAGATG TGCTGTCTTC CATGCAAAGT GGAATTTGAC AATCACTGTG CCGTGCCTTG 60  
GGACATCCTG AAAGCCAGCA TGAACACATC CTCTAATCCT GGGACACCGC TTCCGCTCCC 120  
CCTCCGAATT CAGAATGACC TCCACCGACA GCAGTACTCC TATATTGATG CCGTCTGTTA 180  
CGAGAAACAG CTCATTGGT TTGCAAAGTT TTTCCCCTAT CTGGTGCTCT TGCACACGCT 240  
CATCTTTGCA GCCTGCAGCA ACTTTGGCT TCACTACCCC AGTACCAGTT CCAGGCTCGA 300  
G 301

(2) INFORMATION FOR SEQ ID NO:1468:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1468:

GAATTCGGCC TTCATGGCCT AGTGGAAAAT GGGAGGCATG AAATACATCT TTTCGTTGTT 60  
GTTCTTTCTT TTGCTAGAAG GAGGCAAAAC AGAGCAAGTA AAACATTCAG AGACATATTG 120  
CATGTTTCAA GACAAGAAGT ACAGAGTGGG TGAGAGATGG CATCCTTACC TGGAACCTTA 180  
TGGGTTGGTT TACTGCGTGA ACTGCATCTG CTCAGAGAAT GGAATGTGC TTTGCAGCCG 240  
AGTCAGATGT CCAAATGTTT ATTGCCTTTC TCCTGTGCAT ATTCCTCATC TGTGCTGCCC 300  
TCGCTGCCCC GAAGACTCCT TACCCCCAGT GAACAATAAG GTGACCAGCA AGTCTTGCGA 360  
GTACAATGGG ACAACTTACC AACATGGAGA GCTGTTTCGTA GCTGAAGGGC TCTTTTCAGAA 420  
TCGGCAACCA CTCGAG 436

(2) INFORMATION FOR SEQ ID NO:1469:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1469:

GAATTCGGCC TTCATGGCCT AGTCTGGGCA ACAGAGCGAG ACCTTGCTCTC AAAAAAAAAA 60  
AAAAAAAAAC AAAGTAAAAA AAGATATGTG TTTGATTAAT AACAGTCCTG ATTTAAACA 120  
ACAGCACTGT CTTTGGAGCC TCACTCAGT ATGCAACTCC TTTATACAGA TTTATTTTA 180  
ATTTTATAA CACACTGCTT GAGAAGCATA TTTATTTCCG TTTTGTGTG TGCATGTGGT 240

GGACAGGAAA CAGTGGTTCA GAGAGATGAA GCACCCTGCC CACCACATGC ACTCGAG 297

(2) INFORMATION FOR SEQ ID NO:1470:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 325 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1470:

GAATTCGGCC	TTCATGGCCT	AGGACCTATT	CTATCAGCAG	CATTTGACAC	CACTGATTAC	60
TCATTCTGCT	CTGGTGTACT	TTCTTCAATT	GCTTCCAAGA	CACCATAAAT	TCTTCTGCCT	120
TGCTGGCTGC	CTTTGCTGGT	TCCTCCTCTT	CTCCCTGACC	TCTTAATGTT	GGAGAACCAC	180
AGGGCTTAGT	CCTTGGTCCT	CTTCTCTCTT	TTCTTTACAC	TGTGGTCCTC	AGTGAGGGAG	240
ATAGGTAGAT	CCACTGTCCC	GATCTTAACC	CAAAGAAAGA	CTTGCTGTCC	AGCTACGGGG	300
GCTGTGGTCA	GAAGGCAGCC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:1471:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 421 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1471:

GAATTCGGCC	TTCATGGCCT	ACAAAAGGAT	GGGAAATGCC	TGCATTCCCC	TGAAAAGAAT	60
TGCTTATTTT	CTATGTCTCT	TATCTGCGCT	TTTGCTGACT	GAGGGGAAGA	AACCAGCGAA	120
GCCAAAATGC	CCTGCCGTGT	GTAATTGTAC	CAAAGATAAT	GCTTTATGTG	AGAATGCCAG	180
ATCCATTCCA	CGCACCGTTC	CTCCTGATGT	TATCTCATTA	TCCTTTGTGA	GATCTGGTTT	240
TACTGAAATC	TCAGAAGGGA	GTTTTTTTATT	CACGCCATCG	CTGCAGCTCT	TGTTATTCAC	300
ATCGAACTCC	TTTGATGTGA	TCAGTGATGA	TGCTTTTATT	GGTCTTCCAC	ATCTAGAGTA	360
TTTATTTCATA	GAAAACAACA	ACATCAAGTC	AATTTCAGGA	CATACTTTCC	GGGTACTCGA	420
G						421

(2) INFORMATION FOR SEQ ID NO:1472:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 233 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1472:

GAATTCGGCC	TTCATGGCCT	AGTACTCCAT	CTCATCCATC	TCATGGTAGT	TCAGAAATGC	60
CTATATTCCT	TCTTAAATTC	ACCAGGATT	TTGTTTTTTC	TTTCACCCCC	TTTTTGCCTT	120
TCTTATTTTC	ATCCTTCCAT	TTCACTCATT	TCCAATCATG	TTTAGCAGTT	TCTATCCTTT	180
TCTTTCCTGG	CGTTTTAGCG	TCACACATAG	AAACCTATCA	CCATCAGCCC	TCG	233

## (2) INFORMATION FOR SEQ ID NO:1473:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1473:

GCGATTGAAT TCTAGTTGCC TACCTACCAA ACTACCTACT GAACTTTTTA ATTTGAAGAT	60
ATTCTTCCTG GACTACTTGT TTATAGTTTA TTAAATGAAC TGCTCTATTT CTAAAACTT	120
TATTTTAAAG GTCCTTTCCC GTTTAGAATG CGGCATACCT TTGCTTGTGG GGTATATATC	180
TCTGATCGTG ATAACCTACCT ACCGAAAACC TTTCATGGCT CCTTGCCAAC TACAAAATTG	240
CGATATCCTC GAG	253

## (2) INFORMATION FOR SEQ ID NO:1474:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1474:

GAATTCGGNC TTCATGGCCT ACCGCAAGTT CCTCCTGACC TTCAGGGAGC CTGACTTAGA	60
GAAGAAGTAC TCCAAGCAGG TAGACGACCG ATTTGGTGCC TATGTGGCGT GTGCCTCGCT	120
CGTCTTCCTC TTCATCTGCT TTGTCCAGAT CACCATCGTG CCCCACTCCA TATTCATGCT	180
CAGCTTCTAC CTGACCTGTT CCCTGCTGCT GACCTTGGTG GTGTTTGTGT CTGTGATCTA	240
CTCCTGCGTA AAGCTCTTCC CCTCCCCACT GCAGACCCTC TCCAGGAAGA TCGTGCGGTC	300
CAAGATGAAC AGCACCTGCG TTGGGGTGTT CACCATCACC CTGGTGTTCC TGGCGGCTTT	360
TGTCAACATG TTCACGTGCA ACTCCAGGGA CCTGCTGGGC TGCTTGCCAC AGGAGCGTCT	420
CGAG	424

## (2) INFORMATION FOR SEQ ID NO:1475:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1475:

GAATTCGGCC TTCATGGCCT ACTCTGTGTT GGTAAGTAAA AGCCCTCCAG CATAGGTATA	60
CACTTAGTTG TTCCTTCCAG TGGTTATCAT ACTTCTTTTC TTGCCATAGT TACATGCTAA	120
CAACGTCCCA AAGCTATAGT TGCTCTTGCA TTTTGTCTT AATTCTTGTA AGATAAACTA	180
ATAATACAGG GAGTAAATGT GCACTGTTTA TTAATTAAAA TCCCCGGGAC ACGGGATAAA	240
CTGAAGGAAA TCGTGCTTTT TGAAAAGTAG GTGTAGCTTG CCATGCTGCA TTGTCTTATA	300
CCCACAAAAC TCGAG	315

## (2) INFORMATION FOR SEQ ID NO:1476:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 321 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1476:

```
GAATTCGGCC TTCATGGCCT AGCCATCATG TTTATTAGAA GGTGATTT TGGTGTGTGC      60
TCTAGACAGA TACAGAATAA ATACCTGCGC CTTGAGAACA GGAAGTCCAC GATTCATACA      120
AAGTGCTCAC TACAGGAAGT TGCTGTGTCA AAATCCAGGC AAGGACCCAA CTCCGGGCAG      180
CCCCTCCTCC CTGCTGACCT CAACAAGGGC TGTGCTATTG TTTTATTATTT TATTATTTTA      240
TTTCTCTTTA TTATTATTAA TATTATTATT ATTTGCTTTT GCTGTGGTCA CTATCATTGG      300
CAAAGTTCCT TTTCCCTCGA G                                     321
```

(2) INFORMATION FOR SEQ ID NO:1477:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 215 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1477:

```
GAATTCGGCC TTCATGGCCT AAGCAAAGCT AAGTGTAATA CTAAAAAGCA GTTTGTGCA      60
ACTGGTCATA AAAGTGATTA AATCTAAAGC TGGCATTAAAT AAGGAAGCAA GGTAATAAAA      120
CAAAAATATA AACAGCTTTG AGAAAGTACA CCTAATAACA AAATCTTGTA ACACAACAAA      180
TGAAATCAC  AAAAAATATA AGGAGACTCC TCGAG                                     215
```

(2) INFORMATION FOR SEQ ID NO:1478:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 291 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1478:

```
GAATTCGGCC TTCATGGCCT AATCGGTCTC CTTGAGAGAG ATCACTAGAA CAGAAAAACA      60
ACCCAGAITA TAACTGGAAT GTTCGAAAAA CATAAAGGAC AGCTCGTAAA GGAGAGAGTA      120
AGAGTCACCA AACACGTGGA TATTTTGGT CTGATCTAC AGTAGCCGT TATCTAGACC      180
AGTAAGTGGA GTTTTGGACA TGCTGCTGCT GTCAACTCAC TGGCTGAAGG AGCACTTCAA      240
GGAATGGGAG GCCTTTCCT GGTCCAGCT CTGATTCCGA TCACTCTCGA G                                     291
```

(2) INFORMATION FOR SEQ ID NO:1479:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 514 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1479:

```
GAATTCTGGCC TTCATGGCCT AGAGAAAGAA ATGGCTCGAA CAGAAAACAG TGGTCTTGAA      60
AGGCAACGCA ACAGTAGGTT ACAAATAGCA TTAGCTTTTT CTTTAAAGAA ATTCATTGTA      120
ACCACTGAAG GATAAGATTT TAAATTAGAA AAATGGAAAT CCTATGAATA AAAAAGTAGT      180
AAGCTTGAGA GCAGAATCAC TGTGGAAAAA AAACAGATTG AAAAATAACT TGCAGGTATC      240
ATAGACAGGA AATTGCCACT AGAGAAAACA GGAAACTTGT GATAGATAAA AATGAAGTAT      300
TTTCATTTGG AACAAGAGAC CAACTGAAGA GAGATCAAGT GAAGGGGGTT TATTTTAATG      360
AAACACAAAG ATTCTTGTGG AAATCAAAGT GCCGGAGCCA GAAACAGGGC TCAACCTTCA      420
AGATTAGAGC TGTATTCAAG TTGTCAAGT TGGCTCTCGG TCCCAAAGCA ACAGCAATGT      480
CACTAAGGTT ACAAGTAAAA GGTAAGCCCT CGAG                                514
```

(2) INFORMATION FOR SEQ ID NO:1480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 194 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1480:

```
GAATTCTAGA CCTGCCCCCTC CACTGCTCCC CATACCCTGG CACGATGCGT TCCTGGTCAC      60
TGATCACCAT CATTGTGGGA AGAGAATCCC AATCCCTGGC ACCTGGGTTT GCCTCATCCA      120
ACCATCCTTC CTTTCTCAG CTGCACCCCC TCTGCAGATC TGAAGACACA CCTCACTCTT      180
CCAGGGCCCT CGAG                                194
```

(2) INFORMATION FOR SEQ ID NO:1481:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1481:

```
GACGCGCCCG GCCTCCTCTT TCATTTTCAGT ATACGTAATA AGAAGTCAGA AATTACCTTT      60
AACCAAGCCT GGAAATCTCC TTATCTAGAT CATTATATTC TTTAGGTACA TTTTCTACTT      120
TCTACATTAC CACTCACAAC AATATTGCTA AATTTTTTCC TCTAAATAAG AAGGATTCCC      180
TTTTTCTAAT AACACTTTCT TTATTTTCT TTAACCTTTC ACTGAAAGCC CCCTCAAAAG      240
CTACCTGGCT TATGCTAACA GTATGTTTGA TGTCCTTTCA ATACTACTCT GTTTCATCT      300
GTCTAGCATC CACCTGCCTC CCAATCTCAA AGTCTCCATC ATATTTTGTG AGTTTTTAGT      360
TTTTTTGTTA TGGTGCAACC TCGAG                                385
```

(2) INFORMATION FOR SEQ ID NO:1482:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1482:

GAATTCGGCC	TTCATGGCCT	AGGTTCTGGG	ATAGCTGATT	GTTGGCCACC	CCCGCCCTGG	60
AATGGAAACC	CTGTTAGGCC	AGGGCCAGAG	CAGGTGGCCA	TGAAGCAAGA	CGGCAAAGGC	120
ATTGGAGGAT	GTCCACCTC	CACACATACG	CCCAGGCATT	TCTTGGCTGG	GGAATGGTGT	180
TACAGGATCC	ACAAGCACAG	AGATGGGAAA	ACAGTGTGTC	TGGGGAACAC	CAAGAGTTGG	240
GGTTGCCTGG	AGGACAGATA	GACTCAGGGG	GGACATCCAG	AGGTAACACT	AGGTCCGCAG	300
GTGGGTTTCA	AGGCCCCAGC	TCTATCCCCT	TATTTCCAGC	CGGATTAAAG	AATAATCTGA	360
GTATGGTTCC	CTCGAG					376

(2) INFORMATION FOR SEQ ID NO:1483:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1483:

GAATTCGGCC	TTCATGGCCT	ATGGATCCAT	CATGGGACAA	TTACTAGTTA	TTACTTTTCC	60
TCCGCTTCAG	AAGGTTTTTC	AGACTGAGAG	CCTAAGCATA	CTGGATCTGT	TGTTTCTTTT	120
GGGTCTCACC	TCATCAGTGT	GCATAGTGCC	AGGCCTGGTC	AGTAATCTTC	TCTACTGTTA	180
TAGTACAGCA	GCTTTTAGGT	CCACTGATTG	CATTCTTAAT	TTGAGTATTT	AATATTTATT	240
TTATTAACCT	AAGGTTTTCA	TTTGTCACTA	TAGCATGGTC	TCATAATTTT	CAAAAAATCA	300
GAAAACAGTA	GATGTTGGCG	TGGATGCAGT	GAACAGGGTT	ACTCGAG		347

(2) INFORMATION FOR SEQ ID NO:1484:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 709 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1484:

GAATTCGGCC	TTCATGGCCT	ACGAGAATAT	TGTGGAGAAC	TGGTCAGTAG	AAGAACAAGC	60
AATGGAAATG	GATTTGAGTG	TCCTTCAACA	GGTAGAAGAT	CTAGAAAGGA	GAGTTGCATC	120
AGCAAGTTTG	CAAGTGAAGG	GTTGGATGTG	TCCAGAGCCT	GCATCAGAAA	GGGAGGACTT	180
GGTATATTTT	GAACATAAAT	CATTTACTAA	ATTGTGCAAG	GAGCATGATG	GAGAATTTAC	240
TGGCGAAGAC	GAAAGCAGTG	CACATGCACT	AGAACGGAAG	AGTGACAACC	CCCTAGATAT	300
AGCTGTAACC	AGGCTGGCTG	ATTTGGAGCG	GAACATTGAA	AGAAGGTATC	TGAAGAGCCC	360
CTTAAGTACC	ACCATTCAGA	TCAAAGCTGA	TAATGTGGGC	ACAGTTACTG	TCCCTGCTCC	420
TGCACCATCC	GTTAGTGGTG	ATGGTGACGG	AATTGAAGAG	GATATTGCTC	CAGGGCTCAG	480
GGTATGGAGA	AGGGCATTAT	CAGAAGCTCG	CAGTGCTGCA	CAGGTAGCTC	TGTGCATTCA	540
GCAATTACAG	AAATCAATAG	CATGGGAAAA	ATCAATTATG	AAAGTTTACT	GCCAAATCTG	600
TCGAAAGGGA	GATAATGAAG	AACTGCTTCT	TCTTTGTGAT	GGCTGTGACA	AAGGCTGTCA	660
TACCTACTGC	CATAGACCCA	AGATTACAAC	AATCCCAGAT	GCTCTCGAG		709

(2) INFORMATION FOR SEQ ID NO:1485:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 272 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1485:

GAATTCGGCC	TTCATGGCCT	ACTGTTTCAG	AACTTCCGTA	CCTTTTCTT	GTATGTAGCA	60
CGTATAAATG	CAGCTGTCAT	GCAGTTCTTT	TCTTTTGCTA	GAAAATTAGT	CAGGAGGTAA	120
GATGAATCTT	CCAAAGTTAT	GTAAATTTT	GTTTAACTTG	ACAAATTAAA	CTTTGTTCTT	180
ATTAAACAAA	TACGTAAACA	AATACTGGAA	AAGCAAAGCT	TATATTTGGG	AGTAAAATGT	240
ATCTTAAAT	GCATGTTCAA	CTTTTGCTCG	AG			272

(2) INFORMATION FOR SEQ ID NO:1486:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 350 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1486:

GAATTCGGCC	TTCATGGCCT	ACCGAGGACG	AGGGGAAGAT	GTCACGCAAG	ATAGAAGGCT	60
TTTGTTATT	ACTTCTCTT	GGCTATGAAG	CCACATTGGG	ATTATCGTCT	ACCGAGGATG	120
AAGGCGAGGA	CCCCTGGTAC	CAAAAAGCAT	GCAAGTGCGA	TTGCCAAGGA	GGACCCAATG	180
CTCTGTGGTC	TGCAGGTGCC	ACCTCCTTGG	ACTGTATACC	AGAATGCCCA	TATCACAAGC	240
CTCTGGGTTT	CGAGTCAGGG	GAGGTCACAC	CGGACCAGAT	CACCTGCTCT	AACCCGGAGC	300
AGTATGTGGG	CTGGTATTCT	TCGTGGACTG	CAAACAAGGC	CCATCTCGAG		350

(2) INFORMATION FOR SEQ ID NO:1487:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 276 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1487:

GAATTCGGCC	TTCATGGCCT	AGTACCTGAA	GGCCTTCAAG	GTGGCCTACA	GCCTTAATGG	60
ACACGAATTC	GATTTCATCC	ATGATGTTAA	TAAAAAACAC	AAGGAGTTTG	TGGGTAAGTG	120
GAACAAAAAC	GCGGTGCATG	TCAACCTGTT	TGAGACCCCT	GTGGAGGCTC	AGTACGTGAG	180
ATTGTACCCC	ACGAGCTGCC	ACACGGCCTG	CACTCTGCGC	TTTGAGCTAC	TGGGCTGTGA	240
GCTGAACGGA	TGCGCCAATC	CCCTGGGCGT	CTCGAG			276

(2) INFORMATION FOR SEQ ID NO:1488:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 595 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1488:

```
GAATTCGGCC TTCATGGCCT AGTGGAGATT ACTTGGCACC ACTCTCCTTT CACAGAGCAG      60
AGTCTGAATA GTCTTCAGAG ATAGGCCTGT GGGCCAGATT GCCATCCCCT ATGGACCAGA      120
AGCCAAGGAT CTCTCTAGTG ATGGTCAGAG GGCCCAAATG GCAGGGATAC CCAGTGATGT      180
CAGGAGGAAT AGTACAGACA GAAGGTGCTA AGCAGACAAT TCAACTGCCA TGTTTGCCA      240
CCCCCTGTGA GCAGGGATTA GGTGTTCAGG CCAGTATCTT GGGCATGGGG GAGCCTTTGG      300
CCAGAAGAGG TATAAAGCTC AGAAGTTTTT CAGTCTGATA ACTATTGATA TAATTTCCAT      360
AGTGTGAGGG AGCGGTATGC TCTACCCTTG TGTATTTAAG GCAGGACAGA GAAATTGAGG      420
ATGCCCTGG GGCTAGATCG ATGATATGAC CAGAAATCAA AAAGGGAATG CATTATTTAT      480
TGCTGTGTAA CACTGTTAAG AGAGGAGGTA GTTAAGGGAT GGATAGGCAC ATAGAGAGGG      540
AAGGTCTCAG GAGAAGGGAT AGAAAGGAAC TATGTTTACA AGAACACAC TCGAG      595
```

(2) INFORMATION FOR SEQ ID NO:1489:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1489:

```
GAATTCGGCC TTCATGGCCT ACAATTTAAT AGTATAACAA ATCCCCTAGA ATAGTAGAGG      60
AGAGAGGAAT CTTCCCCTGA TATGTTTTTG TAATACTTCT TCCTCCTCTT CAGTCAATAG      120
GGAAATGTTT GTTGAAAGAC TACTTTGCAG ACATTTAGAA AGATACAGAG TAAGTGTAAAG      180
ATGTCCCTCC TTGTCCTTGA GGAGTCTCTA GTCAGGCACA GGTAGGACTA AATGAAAAAC      240
AACTACAGAA CTAAGTAGAA GAGTGTACAA TAATATGGGG AATGTGGAAC ACTCGAG      297
```

(2) INFORMATION FOR SEQ ID NO:1490:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1490:

```
GAATTCGGCC TTCATGGCCT ACTTACTTTT CCAAAGAATT TTTCCACCT GGAATAAGAA      60
GAGAGGACTA GTTGAAACAT TTGAGCTGGA GAGGCTTATG GGCAATATGA AGTGGGCCAA      120
ATTCTTGCAA TACACCCTAT TCAATTGAAA GTACAGTGTC TAAGGATAAG AATACTTCTT      180
TAAAGACCAA CAATTGTTTT AATGCAATCT TAATTAGTAA ATGGTTTACA TTTTCTCTAT      240
TGTTATTGGT TTTAAAATTT GCTACCGCTC GAG      273
```

(2) INFORMATION FOR SEQ ID NO:1491:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 660 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1491:

```

GAATTCGGCC TTCATGGCCT ATTGAATTCT AGACCTGCCT CAGGGTAAGG GAGATTTAAT      60
CTTTTTCTTT ACTATTTTCT AGTTTCTATG AGCATGGATT ACTTGTGCAA ATCAAAACAA      120
AACAAACGGA TGGCTCATCC GGCAAACATC CATGGGCAGG GTTGGTGTCT GGTGCTGGAC      180
GCAGAGATGA ATGGAGGGCT CTGGCCTCAG CGGCTCACAG TCTGGTGAGC ATAGACAGTG      240
CTTTCGATGT GAGAGCAGAC CTGAGTGTCT CCTGGGACTC CAGGCACAGT TCTCCCTGCA      300
GCTCACAGCA CTTACCCTTA CTGCACCATT AACTTCTACT CTAGCTCACT GCCTCTTAAC      360
TCTGAGCGCC TTGAAGGCAC AAAATGAGTC CCATCTGGGT CTTTAGCAGC TGGCAGAAAA      420
CCTAGCTCAA ACTCATGCTC TAAAAACCCC TGCTGAGGGA GTGGGCGAAT GCAGGCAGCC      480
CTGGCAGTGG GATCAAGTTC AGGGAGTGGC ACTGGAGGCA TCACCCCAAG GCTGAGAAGA      540
CCTTGAAGTG CTGTTTCAAGG TTTTGCTGTC TCTCCCAAGG CATGACTCGG CCCAGGAGGA      600
GATGGGGCAG ATGCTGCAGA AGGAGGGTTC ATGCCCTCC ACTGCTGCCC ATGACTCGAG      660

```

(2) INFORMATION FOR SEQ ID NO:1492:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1492:

```

GCTGTGCTAT CTGTTGTCCA GCATCTGACA CAGTTGGTTT TATATTTTGT CTGGTTTCTA      60
GTTATTAAGC AGGTTAAGTC TGTTCTCTGC TGTCTATAT AGCAGGAAGC AAAGGTTCTC      120
TCATGAATTT TTAGCATAAT AACATAAGCG TGGATTCCAA AAATTCATTA CACAGATCCT      180
GGAAATCTGT TTACTATGTT TTATACATTC TGTGAAAGCT GGAGAATATA TATTTGTTTT      240
ACTATGTGTA TCGCAAATAA AATATCAATT TCATGTGCCA GAGAATTGAA TACATTATCA      300
AAGGGTCAAC TCGAG                                     315

```

(2) INFORMATION FOR SEQ ID NO:1493:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1493:

```

GGGACAACAA GCCCATCTGG ATGCACGCAG AGGAGCGGGA GGAAAGCAAG GATAAGCGCC      60
GGGACAGCGC CCCCTATGGG GAATACGGCA GCTGGTACAA GGCCTGTAAA GTAGACAGCC      120
CCACAGTCAA CACCACCCTG CGCAGCTTGG GGGCCCTATA CCGGCGCCAG GGCAAGCTGG      180
AAGCCGCGCA CACACTAGAG GACTGTGCCA GCCGTAACCG CAAGCAGGGT TTGGACCCCG      240
CAAGCCAGAC CAAGGTGGTA GAACTGCTGA AAGATGGCAG TGGCAGGCGG GGAGACCGCC      300
GCAGCAGCCG AGACATGGCT GGGGGTGCCG GGCCTCGGTC TGAGTCTGAC CTCGAG      356

```

(2) INFORMATION FOR SEQ ID NO:1494:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1494:

GAATTCGGCC	TTCATGGCCT	AGTAAAGGGA	TTTATAATAA	CATTAAAAAT	TTCGTTAGAT	60
TCCAGCTGAG	CACGAGTATA	GCAGCATTAA	CTTTAATCTC	ATTGGCTACA	TTAATGAACT	120
TTCTAATCC	TCTCAATGCC	ATGCAGATT	TGTGGATCAA	TATTATTATG	GATGGACCCC	180
CAGCTCAGAG	CCTTGGAGTA	GAACCAAGTG	ATAAAGATGT	CATTTCGTAAA	CCTCCTCGCA	240
ACTGGAAAGA	CAGCATTTTG	ACTAAAAACT	TGATACTTAA	AATACTTGTT	TCATCAATAA	300
TCATTGTTTG	TGGGACTTTG	TTTGTCTTCT	GGCGTGAGCT	ACGAGACAAT	GTGATTACAC	360
CTCGAG						366

(2) INFORMATION FOR SEQ ID NO:1495:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 258 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1495:

GCTCGAGCGT	TGAGGTCAAC	ACTTCCTCCA	GGGAAAAGGA	TTCCATTAAT	AGATTGAAA	60
AGTATTTTCAT	AGTCTTTCTC	TGTAAGATCC	AGCCTTACTG	GTACAACCTCT	CGCACCTGCA	120
GACTCCAAGT	ACTTTACATA	GGACGCAGCA	ATATAGTATC	TTCCATAGTT	TTTCATGACT	180
TTATTACGGC	ATTTTTCAT	TAATATTCCG	ATGATGGGCT	TCTTGGCGGT	GTCCCGCTGG	240
GGTCTAGACT	ATCTCGAG					258

(2) INFORMATION FOR SEQ ID NO:1496:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 437 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1496:

GAATTCGGCT	TCATGGCCTA	CTCTCTTTCT	CCATGTTAAA	CCCCTTGGCA	TGAATGAAAG	60
GCTTTCCCCT	TTATCCTTGC	TGTGTTTATT	CATTGTGTCC	AATGAGCTTC	TGAAGGTAGG	120
AGTAACTTTG	CACATTTTGC	TGTGTGGGCT	GCTGCATCTC	TGCCAAAAGG	TTTATGGGAT	180
TTTTACTCAG	GAGATCCAGG	AAAAGGAGGA	GCCTGGAATC	TAAGCACTTA	TCTCCTGAAA	240
AGGTACAGAA	ACATGTTGGA	GATCTTGAGC	CTCAAGGTGC	TTGCTTCAGA	ATTTTCCTGA	300
TTCTCCCTCT	CCAGACCTAT	TCTGTTCTTG	GGACCCAAGC	TTCTTGGCTC	CAGCCCCTC	360
CCCCACTAGA	GGAGCTGGAA	AGTTTGGTGC	TGTGGTCATA	CCAAAGATGG	GCAACACCCA	420
GACTCCTCAC	CCTCGAG					437

(2) INFORMATION FOR SEQ ID NO:1497:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 516 base pairs  
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1497:

GAATTCGGCC	TTCATGGCCT	AGTGCAGGTC	CTGGTGCTTG	ATGGTCGAGG	CCATCTCCTG	60
GGCCGCTGG	CGGCCATCGT	GGCTAAACAG	GTACTGCTGG	GCCGGAAGGT	GGTGGTCGTA	120
CGCTGTGAAG	GCATCAACAT	TTCTGGCAAT	TTCTACAGAA	ACAAGTTGAA	GTACCTGGCT	180
TTCTCCGCA	AGCGGATGAA	CACCAACCCT	TCCCGAGGCC	CCTACCACTT	CCGGGCCCCC	240
AGCCGCATCT	TCTGGCGGAC	CGTGCGAGGT	ATGCTGCCCC	ACAAAACCAA	GCGAGGCCAG	300
GCCGCTCTGG	ACCGTCTCAA	GGTGTGTTGAC	GGCATCCAC	CGCCCTACGA	CAAGAAAAAG	360
CGGATGGTGG	TTCTGCTGC	CCTCAAGGTC	GTGCGTCTGA	AGCCTACAAG	AAAGTTTGCC	420
TATCTGGGGC	GCCTGGCTCA	CGAGGTTGGC	TGGAAGTACC	AGGCAGTGAC	AGCCACCCTG	480
GAGGAGAAGA	GGAAAGAGAA	AGCCAAGAAC	CTCGAG			516

(2) INFORMATION FOR SEQ ID NO:1498:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 329 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1498:

GCGAGCTCCT	GACCTCAGGT	GATCTACCCG	CCTCAGCCTC	CCAAAGTGTT	AGGATTACAG	60
GCGTGAGCCA	CCGCACCTGG	CACCCCCCCC	CTTTTTTTTT	AATATAAATG	ATCAGTCTTA	120
ACTCCCTAGG	TTATCAGGTT	GAGGGGGTGG	GGATGAGGCT	GGGGGACAGA	TTGTTTCCT	180
GGCTTCTAGC	TCGGTGTTCT	TTCTGCCTCT	GTGCACAACA	AGGTATGCGT	GTATTGTTGGT	240
TGTGGACTGT	GGTTGTGGAC	TGCCTATTCA	CAAGTGGCTA	TGAGGCCCAT	CTGCTGATGC	300
TTTTGGATGC	ACTTGGCGAT	GAATCTGAG				329

(2) INFORMATION FOR SEQ ID NO:1499:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 430 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1499:

GAATTCGGCC	TTCATGGCCT	AGGAGCGCGG	TGGCCACGGA	ACGCTGCCCC	GAGCCGCGCG	60
AGGGAGGACC	CGACGCGCGG	CGTTTACCCA	GCGCAGCGTT	CCACCGCTCG	GGTTTGGCTG	120
GATAAAATAA	AAAATGGGGA	TATTGACCTC	CTGTCACTAC	TGCATGGACT	TTGATGGTTT	180
CCAATCATT	CTTTCTCCTC	TGTGTCAATC	TGCCTCTTCG	AGAAATTCAT	ACTCCTGAAT	240
AGCTCTCCAG	ACCCCCAGCT	GGCCATGTGG	TGAGTTCAGG	GCCCCAAATCA	AGTAGTACCA	300
GCAATCAGGG	AACTCCTATC	TGTTTGAAT	GGATTACAC	CAGCCACAAG	CCTGGAAAGA	360
TGGTGTACA	ATCTACAGTC	AGGCAGGATT	CTCCTGTGGA	GCCCTGGGAA	GGGATCAGCG	420
ATCACTCGAG						430

(2) INFORMATION FOR SEQ ID NO:1500:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 375 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1500:

GAATTCGGCC	TTCATGGCCT	AGCCAAGTCT	GGGAAGCCTT	AAGGAAAGGA	GTGCCCCTCG	60
GCGTCTTGGT	CCTCCTGTCC	CTGCTGCAGG	GGCTGGGGCC	TCCGGAGCTG	CTGCGGGCTC	120
CCCTCAGGCT	CTGCTTCGTG	ACCCGTGACC	CATGACCCAC	AGTGCTGGCC	TCCTGTGGGG	180
CCACTATAGC	AGCCACCAGA	AGCCGCGAGG	CCCTCAGGGA	AGCCCAAGGC	CTGCAGAAGC	240
CTCCTGGCCT	GGCTGTGTCT	TCCCCACCCA	GCTCTCCCCT	GCGCCCCTGT	CTTTGTAAAT	300
TGACCCTTCT	GGAGTGGGGG	GCGGCGGGCA	GGGCTGCTTT	TCTTAGTCTG	ATACCAAGCA	360
AGGCCTTTTC	TCGAG					375

What is claimed is:

1. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145,

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or a complement of said sequence.

2. An isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

3. An isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ

ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172, SEQ ID NO:173, SEQ ID NO:174, SEQ ID NO:175, SEQ ID NO:176, SEQ ID NO:177, SEQ ID NO:178, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:182, SEQ ID NO:183, SEQ ID NO:184, SEQ ID NO:185, SEQ ID NO:186, SEQ ID NO:187, SEQ ID NO:188, SEQ ID NO:189, SEQ ID NO:190, SEQ ID NO:191, SEQ ID NO:192, SEQ ID NO:193, SEQ ID NO:194, SEQ ID NO:195, SEQ ID NO:196, SEQ ID NO:197, SEQ ID NO:198, SEQ ID NO:199, SEQ ID NO:200, SEQ ID NO:201, SEQ ID NO:202, SEQ ID NO:203, SEQ ID NO:204, SEQ ID NO:205, SEQ ID NO:206, SEQ ID NO:207, SEQ ID NO:208, SEQ ID NO:209, SEQ ID NO:210, SEQ ID NO:211, SEQ ID NO:212, SEQ ID NO:213, SEQ ID NO:214, SEQ ID NO:215, SEQ ID NO:216, SEQ ID NO:217,

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NO:1393, SEQ ID NO:1394, SEQ ID NO:1395, SEQ ID NO:1396, SEQ ID NO:1397, SEQ ID NO:1398, SEQ ID NO:1399, SEQ ID NO:1400, SEQ ID NO:1401, SEQ ID NO:1402, SEQ ID NO:1403, SEQ ID NO:1404, SEQ ID NO:1405, SEQ ID NO:1406, SEQ ID NO:1407, SEQ ID NO:1408, SEQ ID NO:1409, SEQ ID NO:1410, SEQ ID NO:1411, SEQ ID NO:1412, SEQ ID NO:1413, SEQ ID NO:1414, SEQ ID NO:1415, SEQ ID NO:1416, SEQ ID NO:1417, SEQ ID NO:1418, SEQ ID NO:1419, SEQ ID NO:1420, SEQ ID NO:1421, SEQ ID NO:1422, SEQ ID NO:1423, SEQ ID NO:1424, SEQ ID NO:1425, SEQ ID NO:1426, SEQ ID NO:1427, SEQ ID NO:1428, SEQ ID NO:1429, SEQ ID NO:1430, SEQ ID NO:1431, SEQ ID NO:1432, SEQ ID NO:1433, SEQ ID NO:1434, SEQ ID NO:1435, SEQ ID NO:1436, SEQ ID NO:1437, SEQ ID NO:1438, SEQ ID NO:1439, SEQ ID NO:1440, SEQ ID NO:1441, SEQ ID NO:1442, SEQ ID NO:1443, SEQ ID NO:1444, SEQ ID NO:1445, SEQ ID NO:1446, SEQ ID NO:1447, SEQ ID NO:1448, SEQ ID NO:1449, SEQ ID NO:1450, SEQ ID NO:1451, SEQ ID NO:1452, SEQ ID NO:1453, SEQ ID NO:1454, SEQ ID NO:1455, SEQ ID NO:1456, SEQ ID NO:1457, SEQ ID NO:1458, SEQ ID NO:1459, SEQ ID NO:1460, SEQ ID NO:1461, SEQ ID NO:1462, SEQ ID NO:1463, SEQ ID NO:1464, SEQ ID NO:1465, SEQ ID NO:1466, SEQ ID NO:1467, SEQ ID NO:1468, SEQ ID NO:1469, SEQ ID NO:1470, SEQ ID NO:1471, SEQ ID NO:1472, SEQ ID NO:1473, SEQ ID NO:1474, SEQ ID NO:1475, SEQ ID NO:1476, SEQ ID NO:1477, SEQ ID NO:1478, SEQ ID NO:1479, SEQ ID NO:1480, SEQ ID NO:1481, SEQ ID NO:1482, SEQ ID NO:1483, SEQ ID NO:1484, SEQ ID NO:1485, SEQ ID NO:1486, SEQ ID NO:1487, SEQ ID NO:1488, SEQ ID NO:1489, SEQ ID NO:1490, SEQ ID NO:1491, SEQ ID NO:1492, SEQ ID NO:1493, SEQ ID NO:1494, SEQ ID NO:1495, SEQ ID NO:1496, SEQ ID NO:1497, SEQ ID NO:1498, SEQ ID NO:1499, and SEQ ID NO:1500;

or a complement of said sequence.

4. An isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ

ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172, SEQ ID NO:173, SEQ ID NO:174, SEQ ID NO:175, SEQ ID NO:176, SEQ ID

NO:177, SEQ ID NO:178, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:182, SEQ ID NO:183, SEQ ID NO:184, SEQ ID NO:185, SEQ ID NO:186, SEQ ID NO:187, SEQ ID NO:188, SEQ ID NO:189, SEQ ID NO:190, SEQ ID NO:191, SEQ ID NO:192, SEQ ID NO:193, SEQ ID NO:194, SEQ ID NO:195, SEQ ID NO:196, SEQ ID NO:197, SEQ ID NO:198, SEQ ID NO:199, SEQ ID NO:200, SEQ ID NO:201, SEQ ID NO:202, SEQ ID NO:203, SEQ ID NO:204, SEQ ID NO:205, SEQ ID NO:206, SEQ ID NO:207, SEQ ID NO:208, SEQ ID NO:209, SEQ ID NO:210, SEQ ID NO:211, SEQ ID NO:212, SEQ ID NO:213, SEQ ID NO:214, SEQ ID NO:215, SEQ ID NO:216, SEQ ID NO:217, SEQ ID NO:218, SEQ ID NO:219, SEQ ID NO:220, SEQ ID NO:221, SEQ ID NO:222, SEQ ID NO:223, SEQ ID NO:224, SEQ ID NO:225, SEQ ID NO:226, SEQ ID NO:227, SEQ ID NO:228, SEQ ID NO:229, SEQ ID NO:230, SEQ ID NO:231, SEQ ID NO:232, SEQ ID NO:233, SEQ ID NO:234, SEQ ID NO:235, SEQ ID NO:236, SEQ ID NO:237, SEQ ID NO:238, SEQ ID NO:239, SEQ ID NO:240, SEQ ID NO:241, SEQ ID NO:242, SEQ ID NO:243, SEQ ID NO:244, SEQ ID NO:245, SEQ ID NO:246, SEQ ID NO:247, SEQ ID NO:248, SEQ ID NO:249, SEQ ID NO:250, SEQ ID NO:251, SEQ ID NO:252, SEQ ID NO:253, SEQ ID NO:254, SEQ ID NO:255, SEQ ID NO:256, SEQ ID NO:257, SEQ ID NO:258, SEQ ID NO:259, SEQ ID NO:260, SEQ ID NO:261, SEQ ID NO:262, SEQ ID NO:263, SEQ ID NO:264, SEQ ID NO:265, SEQ ID NO:266, SEQ ID NO:267, SEQ ID NO:268, SEQ ID NO:269, SEQ ID NO:270, SEQ ID NO:271, SEQ ID NO:272, SEQ ID NO:273, SEQ ID NO:274, SEQ ID NO:275, SEQ ID NO:276, SEQ ID NO:277, SEQ ID NO:278, SEQ ID NO:279, SEQ ID NO:280, SEQ ID NO:281, SEQ ID NO:282, SEQ ID NO:283, SEQ ID NO:284, SEQ ID NO:285, SEQ ID NO:286, SEQ ID NO:287, SEQ ID NO:288, SEQ ID NO:289, SEQ ID NO:290, SEQ ID NO:291, SEQ ID NO:292, SEQ ID NO:293, SEQ ID NO:294, SEQ ID NO:295, SEQ ID NO:296, SEQ ID NO:297, SEQ ID NO:298, SEQ ID NO:299, SEQ ID NO:300, SEQ ID NO:301, SEQ ID NO:302, SEQ ID NO:303, SEQ ID NO:304, SEQ ID NO:305, SEQ ID NO:306, SEQ ID NO:307, SEQ ID NO:308, SEQ ID NO:309, SEQ ID NO:310, SEQ ID NO:311, SEQ ID NO:312, SEQ ID NO:313, SEQ ID NO:314, SEQ ID NO:315, SEQ ID NO:316, SEQ ID NO:317, SEQ ID NO:318, SEQ ID NO:319, SEQ ID NO:320, SEQ ID NO:321, SEQ ID NO:322, SEQ ID NO:323, SEQ ID NO:324, SEQ ID NO:325, SEQ ID NO:326, SEQ ID NO:327, SEQ ID NO:328, SEQ ID NO:329, SEQ ID

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or to a complement of said sequence.

5. An isolated protein encoded by an isolated polynucleotide of claim 1.
6. An isolated protein encoded by an isolated polynucleotide of claim 2.
7. An isolated protein encoded by an isolated polynucleotide of claim 3.
8. An isolated protein encoded by an isolated polynucleotide of claim 4.

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<b>(21) International Application Number:</b> PCT/US98/06955 <b>(22) International Filing Date:</b> 10 April 1998 (10.04.98)  <b>(30) Priority Data:</b> 08/838,821 10 April 1997 (10.04.97) US  <b>(71) Applicant:</b> GENETICS INSTITUTE, INC. [US/US]; 87 CambridgePark Drive, Cambridge, MA 02140 (US).  <b>(72) Inventors:</b> JACOBS, Kenneth; 151 Beaumont Avenue, Newton, MA 02160 (US). MCCOY, John, M.; 56 Howard Street, Reading, MA 01867 (US). LAVALLIE, Edward, R.; 113 Ann Lee Road, Harvard, MA 01451 (US). RACIE, Lisa, A.; 124 School Street, Acton, MA 01720 (US). MERBERG, David; 2 Orchard Drive, Acton, MA 01720 (US). TREACY, Maurice; 93 Walcott Road, Chestnut Hill, MA 02167 (US). SPAULDING, Vikki; 11 Meadowbank Road, Billerica, MA 01821 (US). AGOSTINO, Michael, J.; 26 Wolcott Avenue, Andover, MA 01810 (US).  <b>(74) Agent:</b> SPRUNGER, Suzanne, A.; Genetics Institute, Inc., 87 CambridgePark Drive, Cambridge, MA 02140 (US).		<b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>  <b>(88) Date of publication of the international search report:</b> 12 November 1998 (12.11.98)
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BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece	ML	Mali	TR	Turkey
BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
BY	Belarus	IS	Iceland	MX	Mexico	US	United States of America
CA	Canada	IT	Italy	NE	Niger	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NL	Netherlands	VN	Viet Nam
CG	Congo	KE	Kenya	NO	Norway	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NZ	New Zealand	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	PL	Poland		
CM	Cameroon	KR	Republic of Korea	PT	Portugal		
CN	China	KZ	Kazakstan	RO	Romania		
CU	Cuba	LC	Saint Lucia	RU	Russian Federation		
CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						



# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 98/06955

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C12N15/12 C12N5/10 C07K14/47 C12Q1/68 A61K38/17

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C12N C07K C12Q A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 97 07198 A (GENETICS INSTITUT) 27 February 1997 see the whole document ---	1-8
A	WO 97 04097 A (GENETICS INST) 6 February 1997 ---	1-8
A	ADAMS M D ET AL: "3,400 NEW EXPRESSED SEQUENCE TAGS IDENTIFY DIVERSITY OF TRANSCRIPTS IN HUMAN BRAIN" NATURE GENETICS, vol. 4, no. 3, July 1993, pages 256-267, XP000611495 see the whole document ---	1-8
-/-		

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"Z" document member of the same patent family

Date of the actual completion of the international search

3 July 1998

Date of mailing of the international search report

3 0. 09. 98

Name and mailing address of the ISA

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HORNIG H.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 98/06955

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 536 637 A (JACOBS KENNETH) 16 July 1996 cited in the application see the whole document ---	1-8
A	JACOBS K ET AL: "A NOVEL METHOD FOR ISOLATING EUKARYOTIC CDNA CLONES ENCODING SECRETED PROTEINS" JOURNAL OF CELLULAR BIOCHEMISTRY - SUPPLEMENT, vol. 21A, 10 March 1995, page 19 XP002027246 see abstract ---	1-8
A	WO 90 14432 A (GENETICS INST) 29 November 1990 see the whole document ---	1-8
A	WO 96 17925 A (IMMUNEX CORP) 13 June 1996 see the whole document -----	1-8

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 98/ 06955

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see further information sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

see further information sheet, subject 1.

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1. Claims: (1-8) partially

An isolated polynucleotide comprising a nucleotide sequence selected from SEQ ID no.1, consisting of a nucleotide sequence selected from SEQ ID no.1, consisting essentially of a nucleotide sequence selected from SEQ ID no.1; an isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence consisting of SEQ ID no.1; an isolated protein encoded by said isolated polynucleotides;

Inventions 2 to 1500. Claims: (1-8) partially

Idem as subject 1 but limited to SEQ ID nos.2 to 1500 respectively clone ID nos. BV34 to BK517. (Invention 2 is limited to SEQ ID. no. 2; Invention 3 is limited to SEQ ID no. 3;.....Invention 1500 is limited to SEQ ID no. 1500);

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 98/06955

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9707198 A	27-02-97	US 5707829 A AU 6712396 A AU 6768596 A EP 0839196 A EP 0851875 A WO 9704097 A	13-01-98 18-02-97 12-03-97 06-05-98 08-07-98 06-02-97
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WO 9617925 A	13-06-96	AU 4639396 A CA 2206488 A FI 972390 A NO 972455 A	26-06-96 13-06-96 05-06-97 06-08-97

